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VIA FED-EX

October 28, 2011

Craig Whitenack, Civil Investigator
United States Environmental Protection Agency
Region IX, Southern California Field Office
600 Wilshire Avenue, Suite 1420
Los Angeles, California 90017

Re: Yosemite Creek Superfund Site, San Francisco, CA
Supplemental Response to 104(e) Information Request

Dear Mr. Whitenack:

Please accept this letter and the attached documents as a supplement to NL Industries, Inc.'s ("NL") prior responses to the United States Environmental Protection Agency's ("EPA") information request concerning the Yosemite Creek Superfund Site (the "Site"). NL originally responded to EPA's information request on January 7, 2010, and supplemented its response on October 21, 2010.

Recently, NL discovered additional materials that provide information concerning operations at NL's former facility at 2240 24th Street ("24th Street Facility"), one of the two former NL facilities allegedly linked to the Bay Area Drum Site. These documents, which are enclosed, relate to litigation that took place more than ten years after NL donated its 24th Street Facility to a third party and include excerpts of deposition testimony from five persons, three of whom are former NL employees, as well as a draft and a Final Environmental Impact Report for the 24th Street Facility. NL hereby supplements its prior response to Question 30 of EPA's information request.

It is possible that some or all of these documents may have previously been provided to the California Department of Toxic Substances Control or EPA. NL has searched for but has not been able to find complete transcripts of the attached depositions. Complete copies of the transcripts will be provided if they are located.

In addition, as a supplement to its Responses to Questions 3 and 5 of EPA's information request, NL is also enclosing the October 14, 2011 Affidavit of Fred Oberlin, a former NL employee who supervised the laboratories at NL's 24th Street Facility and its Marin Street facility (the other former NL facility with an alleged nexus to the Bay Area Drum Site). As set forth in


Craig Whitenack, Civil Investigator
US EPA, Region IX
October 28, 2011
Page 2

Mr. Oberlin's affidavit, PCBs were not used in any of the production processes, including those for varnishes and lacquers, that occurred at the 24th Street Facility or the Marin Street facility. Likewise, only negligible amounts of lead may have been used at the 24th Street Facility as an ingredient in the dryers used during the production of varnishes, and no lead was used in the production of lacquers. Accordingly, any drums of varnishes and lacquers that may have been taken to the Bay Area Drum Site from the 24th Street Facility or the Marin Street facility for reconditioning would not have contained any PCBs. Nor would they have contained any appreciable amount of lead. Mr. Oberlin also confirms drums picked up from the 24th Street Facility were essentially empty.

Lastly, in response to Question 24 of EPA's information request, NL provides the following additional names and last contact information for persons who may have some knowledge of operations, but not necessarily of environmental matters, at the 24th and Marin Street properties: Marvin Nance, Privacy Act
Donald Nazario, Privacy Act
Fred Oberlin, Privacy Act
Rasmussen, Privacy Act
Thomas
and Carrie and Lewis Roa, Privacy Act

Please note that NL provides the enclosed documents and the information in this letter subject to the general and specific objections set forth in detail in NL's January 7, 2010 original response to EPA's information request. NL further reserves its right to supplement its original response should more information become available. Please feel free to contact me directly should you have any questions.

Sincerely,


Courtney J. Riley

Enclosure

cc: Elizabeth Thanne Cox
Office of Regional Counsel

1 IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA

2 IN AND FOR THE COUNTY OF SAN FRANCISCO

3 ---o0o---

4 THE SYNANON CHURCH,

5 Plaintiff,

6 -vs-

7 FOXCROFT ASSOCIATES, a Partnership;
8 RANDALL F. BAUKNEY; STEPHEN B.
9 BEREZIN; JOSEPH SKIFFER; and
10 DOES 1 through 10, inclusive,

11 Defendants.

12 FOXCROFT ASSOCIATES, a California
13 General Partnership; RANDALL F.
14 BAUKNEY, STEPHEN P. BEREZIN and
15 JOSEPH SKIFFER, JR., as Individuals,

16 Cross-Complainants,

17 -vs-

18 THE SYNANON CHURCH: NL INDUSTRIES,
19 INC., a Corporation; and DOES I
20 through C, inclusive,

21 Cross-Defendants.

22 STUART M. KAPLAN, Receiver for
23 2222 Ltd., a California Limited
24 Partnership,

25 Intervenor.

26 ---o0o---

27 FRIDAY, NOVEMBER 9, 1984

28 ---o0o---

DEPOSITION OF

RICHARD MARKLIN

---o0o---

ALICE GEE SOON, CSR LICENSE NO. 2577

No. 804196

COPY

EXHIBIT 3

1 However, that is not true in the case of the war years
2 because then your plant was working the shipyards for
3 the services. They were producing all kinds of
4 specification products, and I think the balance of
5 production during that time was just about the reverse,
6 that you had about 80 percent government work.

7 Q. Generally speaking, were paint and varnish the principal
8 products?

9 A. Paint and varnish were the principal products. We
10 also made shellac and the lacquer. But the lacquer
11 were not made in those premises.

12 Q. Was the lacquer made somewhere else in the Bay Area?

13 A. They had a warehouse down at Kansas and Marin across
14 from Army Street. The lacquer plant was there.

15 Q. What was the capacity of the plant for paint production
16 on an annual basis?

17 A. Varied between a million and a half and three million
18 gallons.

19 Q. What about varnish? What was the capacity for that
20 production?

21 A. That would be two to three million gallons also. It
22 wasn't all for retail sale. The varnish that was
23 produced there was used in making the paint products,
24 but there were also separate industrial varnishes made
25 as well. But the majority of the varnish production
26 went to the paint plant and was used in the production
27 of paint products.

28 Q. And the rest of it was sold directly? Did the paint

1 receiving hiding pigment from zinc and from lead.

2 Neither one of those can be classified as important
3 for that particular purchase.

4 Q. Were lead or zinc important for any part of the paint
5 production process?

6 A. Zinc was considered the needed ingredient to give a
7 hard paint film. Lead was considered needed for exterior
8 durability.

9 Q. Were lead and zinc used in the paint production throughout
10 the period that you were at the plant, again, this 28-
11 year period?

12 A. No. I think lead was phased out sometime prior to --
13 sometime prior to the shutdown of the plant.

14 Q. What about zinc?

15 A. That was in use the total time I was there.

16 Q. Were there any principal suppliers of the -- let me back
17 up a minute. When you say zinc was used to ensure a
18 hard paint film, was that zinc considered a pigment
19 or what kind --

20 A. Pigment.

21 Q. What about the lead that was used for exterior durability?

22 A. A hiding pigment.

23 Q. Were there any principal suppliers of the lead pigments?

24 A. Yes. National Lead. They had a lead plant over in
25 San Leandro.

26 Q. Was that a different division than the National Lead
27 Company?

28 A. It was a different division.

1 Q. But most of the lead was acquired then internally
2 rather than externally?

3 A. Well, within the company, yes.

4 Q. What about the zinc? Were there any particular suppliers
5 of that?

6 A. No. There were several suppliers of zinc and there was
7 quite a changeover, as I recall, of the operations of
8 the zinc of suppliers coming and going, being purchased
9 by another company, so on and so forth. There were two
10 or three suppliers of zinc.

11 Q. Was Reichold Chemical Company a supplier of metallic
12 pigment?

13 A. Yes.

14 MR. WEILL: Spelling of Reichold?

15 Q. (By Mr. Hoffman) R-e-i-c-h-o-l-d?

16 A. Right.

17 Q. Did they supply lead or zinc?

18 A. They supplied color pigments.

19 Q. What were the principal metallic constituents of those?

20 A. Those were lead chromates. Reichold was only one of a
21 number of suppliers on those.

22 Q. What colors were those lead chromates used to produce?

23 A. Reds, greens, yellows.

24 Q. Was that the principal pigment used for coloring?

25 A. It was in the forties and fifties.

26 Q. What replaced it?

27 A. Organic colors. Produced by Du Pont basically known as
28 phthalocyanine.

1 approximating?

2 A. I think they were down to the twenties by then.

3 Q. Did Imperial Chemical Company supply pigments?

4 A. Yes.

5 Q. What principally did they supply?

6 A. They also supplied lead chromates similar to Reichold.
7 They were just a little alternate supplier.

8 Q. Were there any other chromium compounds that were used
9 as pigments?

10 A. Not that I can think of.

11 Q. What I want to ask you about now is in what form, that is,
12 what kind of containers, were these pigments generally
13 received when they came in to be used for the production?

14 A. Fifty-pound bags was the most common packaging.

15 Q. Were these bags plastic or heavy paper?

16 A. Heavy paper.

17 Q. Was that generally true, that is, the 50-pound bags,
18 being used for all the kinds of pigments we have been
19 talking about?

20 A. Yes. There were some exceptions where some material came
21 in fiber drums, some cases in lighter packages than
22 50 pounds, and in a few cases heavier packages than 50
23 pounds.

24 Q. These came in initially by truck, I take it?

25 A. Yes. There was no rail spur.

26 Q. There was a driveway, if I am correct, along Kansas
27 Street toward the southwestern portion of the property?

28 A. This was the entrance to the inner yard, yes.

- 1 Q. All right. Did the trucks actually come right into the
2 yard when they delivered the pigments?
- 3 A. No. Most of the pigments were unloaded out in the
4 street.
- 5 Q. On Kansas Street?
- 6 A. On Kansas Street.
- 7 Q. How were they then brought into the yard?
- 8 A. They were not brought into the yard. They were brought
9 into the basement which was down -- bottom levels of
10 Buildings 21 and 22 with the fork lift. They were
11 palletized, stored either down there or run by elevator
12 up to the third floor where there was some storage of
13 color pigment up in Building 22.
- 14 Q. So, there was direct access to Buildings 21 and 22 from
15 Kansas Street?
- 16 A. No. There was only an entrance over here in Building 22,
17 but you could go through in the basement or the first
18 level floor, ground level, from one building to the other.
- 19 Q. But there was access to Building 22 from Kansas Street?
- 20 A. Yes. That was the main access.
- 21 Q. Now, the varnishes that were supplied by the plant
22 itself, where were they kept until they were to be used
23 in the actual paint production?
- 24 A. Originally there was -- there were tanks out here as
25 indicated.
- 26 Q. By "out here," Mr. Marklin, you are referring to the
27 area that is south of Building 19?
- 28 A. Uh-huh.

1 Q. And the varnish then was pumped from those buildings
2 to where?

3 A. Over into Building 21.

4 Q. At the lower levels?

5 A. No. The third floor level.

6 Q. Were the pumps used to pump the varnish before the,
7 I guess, shall we call it, oil tank deck was demolished?

8 A. Before the oil tank deck was demolished, why, everything
9 was handled in drums, and these tanks were used basically,
10 I believe, for the varnish department rather than the
11 paint plant, and they did have thinner storage out there
12 also before they put in the underground tanks up there.

13 Q. Do you remember when the underground tanks were put in?

14 A. I don't remember the year, no.

15 Q. But it was during the time that you were there?

16 A. Yeah.

17 Q. All right. Was any of the thinner sold directly or was
18 that all used in production?

19 A. Some of the thinner was sold directly. It was packaged
20 in the varnish department and sold as a packaged product.

21 Q. When the oil tank deck was used for the varnish storage,
22 did I understand you then to say that that was for
23 varnish that was to be sold outside the plant?

24 A. Not necessarily. They received large quantities of the
25 things. They always did anticipate -- tried to anticipate
26 price changes in oil. If there was reason to believe
27 they would make a good buy, they would make large
28 quantities to save as much money as they could. And the

1 8 and they were there for the purpose of varnish
2 department filling. In other words, they would make
3 a given varnish. They would put it in the tank prior
4 to package.

5 Q. For the end product?

6 A. Yes. So, for retail purpose.

7 Q. There is a reference, Mr. Marklin, to Building 19-1/2.
8 I think it says 100-gallon chemical tank. I am not sure.
9 Does that ring a bell?

10 A. No.

11 Q. Do you recall any tank in that particular location at
12 any time?

13 A. No, I don't. No, I don't. It doesn't indicate whether
14 -- what level it is on, does it? I can't really
15 identify any chemicals.

16 Q. Let me ask you about the thinner tanks. Those were
17 installed beneath the sidewalk, is that correct?

18 A. That is correct.

19 Q. Do you know who is in charge of that installation?

20 A. Yes.

21 Q. Who is that?

22 A. It was our plant engineer at the time.

23 Q. What was his name?

24 A. Carlton Moore, M-o-o-r-e.

25 Q. Again, do you know his present whereabouts?

26 A. Yeah.

27 Q. Where is he?

28 A. He is retired down in Santa Cruz area.

1 Q. Before those tanks were installed, where was thinner
2 stored?

3 A. Well, they did have thinner out there originally, I
4 believe.

5 Q. When you say "out there," you are referring in the tank
6 farm?

7 A. Tank farm, yeah.

8 Q. Were there any other storage areas for thinner?

9 A. I am trying to remember whether all those five tanks
10 went in simultaneous or whether there were some that
11 may not have been in there. I don't recall the details.
12 I'd rather not say.

13 Q. The indication on the plan is the tank contains 10,000
14 gallons of thinner each, is that in accord with your
15 recollection --

16 A. That could be.

17 Q. -- as to the capacity? Where was the thinner pumped to
18 from those tanks?

19 A. It was pumped to points of use within the varnish plant
20 all the way over to the paint plant, Building 21 or
21 Building 19.

22 Q. What levels of those buildings was that pumped to?

23 A. Second and third levels. Solvent had outlets all over
24 the place. You had to have solvent for wash-up purposes,
25 so you had it down in various outlets in each building.
26 Some of it was for production use, some of it for
27 wash-up purposes, what have you.

28 Q. Were these pipes that thinner was pumped through, were

1 in drums?

2 A. Those were empty. Those were empty drums, empty drums,
3 dirty or drained. You had to send dirties out that
4 were empty and receive clean ones in return.

5 Q. They had been emptied previously in the paint factory?

6 A. That is correct.

7 Q. And they contained, again, what?

8 A. Varnishes.

9 Q. Varnishes. Those would be varnishes produced inside?

10 A. We had as many as a hundred to one hundred and fifty
11 varnishes. So, you couldn't -- and some of them were
12 in small volumes. They were still tiny bits, you used
13 the drum. If you had a large volume of something, you
14 had storage over in that area where you could pump
15 directly.

16 Q. What percentage of the varnish production generally was
17 used in the paint production process?

18 A. Three-quarters of it.

19 Q. Now, you referred to a mixing area. What I would like to
20 do is sort of go through the paint production process
21 step by step if we could, and is that the right place
22 to start?

23 A. Yeah. Well, almost. The best place to start is on the
24 receiving. You receive the raw materials and transport
25 it into storage. Paint business is a batch business.
26 You decide how much you are going to make, whether it is
27 going to be 50 gallons or 500 gallons or what. You then
28 put together a batch ticket indicating all the raw

1 materials to be used. This is given to the workers
2 out in the plant.

3 You in turn would collect the raw materials
4 and make an initial mixing which is done on the third
5 floor. And in there you take your vehicle which is
6 your varnish, some solvent and throw all the pigment in
7 and wet it all out and end up with a paste. After you
8 have a paste produced on the third floor, it normally has
9 to be ground because it is all coarse and lumpy and
10 whatnot.

11 So, it goes from the third floor through a mill
12 of one kind or another and there are various mills on
13 the second floor. And then ends up in a paint tank down
14 on the first floor at which point there is more solvent
15 and varnish added. And if there is any shading to be
16 done to a particular color, that is done at that point.
17 And after that, it is approved by the laboratory, that
18 particular batch of paint is packaged out.

19 Q. That is a hundred percent better than I could have done
20 it by asking questions as we go along.

21 Alice, would you mind reading that back just so
22 we --

23 MR. WEILL: Thank you.

24 MR. HOFFMAN: -- have that clear in our mind.

25 (Record read.)

26 Q. (By Mr. Hoffman) Mr. Marklin, whose job was it to
27 prepare the batch ticket that you referred to?

28 A. It was done in the factory office. Raw material

1 inventory control is done there. You had an inventory
2 control for finished goods in an adjacent area, and
3 the batch ticket inventory control would decide what
4 they wanted and when they wanted it. They give that as
5 a bit of information to the factory office which would
6 then put out a batch for what was required. All the
7 forms were reviewed by the laboratory to make sure what
8 was occurring while the changes were taken care of.

9 Q. Did the superintendent have any responsibilities as far
10 as filling out the batch tickets?

11 A. Done by clerical.

12 Q. I see.

13 A. The girls with calculators and typewriters.

14 Q. I take it the superintendent's job was to oversee this
15 whole process of production that you just described?

16 A. Sure. Right.

17 Q. You referred to the mixing on the third floor. Now, was
18 that Building 21 that you were referring to?

19 A. It was 19, 21. 19 and 21.

20 Q. I think you said earlier, and I have forgotten, there is
21 some connection at that level between those two buildings?

22 A. Yes. You could walk all the way through from one end
23 to the other. You had fire doors in between these
24 buildings, but I mean there were free passage there,
25 19 and 21.

26 Q. And the mixing took place, I take it, in some sort of
27 tanks or vats?

28 A. Yes.

- 1 Q. Roughly how many of those tanks or vats were there on
2 that third floor level?
- 3 A. Well, at least a couple dozen, 24 to 30 of them.
- 4 Q. Generally what was their size or capacity?
- 5 A. Originally when I started there, they were small 50-gallon
6 mixtures which were then later replaced by mixtures
7 which would make 150 to 200 gallons. When we got into
8 the water paint business, we went into large mixtures
9 which were one-step productions referred to as
10 dispensers, and those were thousand gallons.
- 11 Q. And those were installed on the third floor also?
- 12 A. Yes.
- 13 Q. Was the mixing, was that a mechanical agitation of
14 some kind?
- 15 A. Right. Pretty much as dough mixers with intermixing
16 blades.
- 17 Q. Was the varnish or the other medium pumped in those
18 mixing plants?
- 19 A. In most cases came from drums. Later there was some
20 pumping.
- 21 Q. So, there is somebody out there to pour the varnish from
22 the drum into the mixing tank?
- 23 A. That is right.
- 24 Q. Was part of it raised --
- 25 A. There is so many mixings. The material is quite
26 viscous and quite difficult to pump.
- 27 Q. Was there an overhead platform? What was the process?
- 28 A. The height of the tank was about table height or a little

1 bit more so the bags could be lifted. And there were
2 hoists to pick up the drums and lift them over the
3 mixing to drain them.

4 Q. How big around were the tanks generally, again?

5 A. Five by five or something like that.

6 Q. Were they square or round?

7 A. Rounds.

8 Q. Round about five feet across?

9 A. Four feet, five feet. They varied in size.

10 Q. And the pigments, were they emptied then directly from
11 the bags into the mixing tanks?

12 A. Right.

13 Q. And the thinner, how was that introduced?

14 A. That was pumped in.

15 Q. Into those tanks?

16 A. Yeah.

17 Q. Directly to the tanks?

18 A. Yes, directly. Well, they had weigh scales. I think
19 they went to the weigh scales and then from the weigh
20 scales drained it into the mixture they were working on.

21 Q. Was that a ^{gravity} graft process?

22 A. That was ^{gravity} graft process. The tank arrangements changed
23 over the years where there were many stationary tanks.
24 We eventually got rid of all stationary tanks and went
25 to portable tanks that could be moved around. Portable
26 agitators and things of that nature, that all evolved
27 over the years.

28 Q. That gave you more flexibility, I suppose?

1 A. Yes.

2 Q. When the mixing process was complete, what then
3 happened with the -- do you have a name for the
4 material at that stage when --

5 A. It was referred to as the base.

6 Q. The base.

7 A. And it would be removed by chute, dropped down through
8 the floor below where the mills were. You had the
9 ability to open up these mixtures. They had gates at
10 the bottom of them. You can open up the gates and
11 let the base flow out, and that in turn would flow down
12 to the mill on the floor below where it could be ground.

13 Q. When you say a chute, was this something that dropped
14 from the third floor down to the second floor?

15 A. That is right.

16 Q. Did all the transfer of the base to the mill occur in
17 that fashion?

18 A. Yeah.

19 Q. About how many of these chutes were there? Were there
20 one for each tank?

21 A. One for every mixer.

22 Q. Were they open or closed?

23 A. Open.

24 Q. Metallic, I take it? Steel?

25 A. Metallic.

26 Q. Aluminum? Do you know what they were made of?

27 A. They were not aluminum. They were just regular plate.

28 Q. I take it that was a very viscous material also --

1 A. Yes.

2 Q. -- at that stage? Would it all flow by ^{gravity} ~~grat~~ through
3 the chute down to the mill, or did they have to --

4 A. They had to probably scrape out what was probably left
5 in the mixture, but the majority would run down without
6 any trouble.

7 Q. If you are going to use the mixer for something else
8 after that, they have to clean it out in some way?

9 A. Well, there was enough mixers so you normally had
10 certain ones assigned to white and assigned to color.
11 There is green mixer, red mixer and so on.

12 Q. Did they clean them out periodically?

13 A. Certainly. You had to.

14 Q. How would you do that?

15 A. You can go in there with an air hammer and a chisel.
16 There is no easy way of doing it.

17 Q. So, you can't do it with a hose or something like that?

18 A. No. You can't do it with a hose. In addition to all
19 that equipment, there was also what we refer to as
20 closed mills. They were large, round mills where you
21 dump all your pigment and liquid in the mills with
22 steel balls or pebbles, and these would roll for 24
23 hours. In that time, why, everything would be dispersed
24 and ground, and you just drain it out into a tank. To
25 say there were many pieces of equipment that were used
26 around, that is just another one.

27 Q. Were those mills on the second floor?

28 A. They were on the second floor.

1 Q. We will get to that. I am trying --

2 A. They were loaded from the third floor, some on the
3 second floor.

4 Q. I am sorry. I didn't hear the first part.

5 A. They were loaded from the third floor. You dropped
6 your liquid from the third floor. They were located
7 in the second floor. They were horizontal cylinders.

8 Q. The mills were horizontal cylinders?

9 A. Yes.

10 Q. Was this a way you could by-pass the mixing tanks then?
11 Did I understand you correctly?

12 A. Yes.

13 Q. You could start the process --

14 A. The mixing and the grinding simultaneously.

15 Q. What about the agitation? How long would that typically
16 take in the mixing tanks?

17 A. Twenty minutes. I mean once it was put together. It
18 would take longer than that to put together possibly,
19 but once it is put together, it is practically ready
20 to be processed further.

21 Q. The mixing tank cleaning, was that an in-house job?
22 Was there a maintenance crew?

23 A. It was an in-house job. It wasn't done too often. It
24 was done maybe two or three times a year on those.

25 Q. What would they get? A sludge of some kind?

26 A. You get a lot of skins. You get a build-up of skin
27 which dried over a period of time and you just chip them
28 off and you get the thick skins out to go in the garbage

1 and out to the garbageman.

2 Q. What about the inside of the building itself? Did
3 they have any way of cleaning that just from all the
4 waste and spills that occurred during the production
5 process?

6 A. The work areas were swept each and every day and
7 vacuumed once a week.

8 Q. Did they wash them out with any kind of water or
9 anything like that? Was that ever done?

10 A. You are talking about the mixture?

11 Q. No. The interior of the buildings. Other than being
12 swept and vacuumed, I mean, were they hosed down or
13 anything of that nature?

14 A. It wasn't practical to do anything like that. However,
15 the area was vacuumed and painted, oh, I don't know
16 what period of time that was, but it was done for
17 housekeeping purposes.

18 Q. From time to time?

19 A. Yeah.

20 Q. Now, you started to describe the mills that were on the
21 second floor. Was the milling operation basically what
22 the second floor was devoted to?

23 A. Basically it was, except it also handled the small
24 batches, small batches meaning up to 200 gallons. The
25 larger tanks were on the first floor. They were 500
26 to a thousand. And the second floor had eventually
27 portable tanks of 100, 200 gallons.

28 Q. Again, this would be finished product?

- 1 A. You ground the paste into them and finished the
2 products in those tanks, yes.
- 3 Q. But for the most part the base that came out of the
4 third floor went into the mills on the second floor?
- 5 A. Yes. And those mills could in turn put it into tanks
6 in the first floor or into portable tanks on the second
7 floor.
- 8 Q. How did it get from the mills? Well, did you have a
9 name for what resulted after the product had gone through
10 the milling stage?
- 11 A. Well, it was still the same thing as you had on the
12 third floor except it was then ground and dispersed.
13 It was still a base. It was not a finished product
14 until additional vehicle and/or solvents were added to it.
- 15 Q. Was it still a relatively viscous substance?
- 16 A. Yes.
- 17 Q. How did it get from the mills down to the tanks on the
18 first floor?
- 19 A. By chutes again.
- 20 Q. Open chutes?
- 21 A. Open chutes.
- 22 Q. Same kind of chutes as took it from the third to the
23 second?
- 24 A. Third to -- right.
- 25 Q. These mills, did you say they were horizontal cylinders?
- 26 A. No. That was one type of mill. The ones that we talked
27 about feeding from the third floor, those were roller
28 mills which consisted of three roller mills or five

1 roller mills. You are getting complicated in terms
2 of describing it for her benefit. You had what they
3 refer to as higher speed mills or morehouse mills.
4 These were two stones which rotated one above the other.
5 You had sand mills which are something that Du Pont
6 invented in pumping material through the sand while it
7 is being agitated. These are things that you are getting
8 into. In addition to that, you had what we refer to
9 as closed mill, ball and pebble mill.

10 Q. Were the mills installed in some kind of tank or
11 container?

12 A. No. It was sitting on the floor. You can feed on top.
13 It had an outlet where you can put it in a tank or chute
14 to go into wherever you want to go with it.

15 Q. Then when the product got down on the first floor from
16 the mills, what was done to it there?

17 A. It was reduced with more solvent and varnishes or latex,
18 whatever you are making, and then processed through the
19 control laboratory for required shading. It is shaded
20 there, again passed through the control laboratory for
21 packaging.

22 Q. By shading, what do you mean by that?

23 A. Tinting. You start out with white and you want an
24 ivory. If someone has to put color into it, so they use
25 tinting colors and added to that to match whatever
26 standard of color they were trying to match.

27 Q. So, were these other pigments then that were added at
28 that level of the process?

- 1 A. Not dry pigment. They were paste.
- 2 Q. Earlier you referred to the lead chromates. For
- 3 example, did they come in the form of a powder or as
- 4 a paste or --
- 5 A. It came as a powder which we would make into the form
- 6 of a paste.
- 7 Q. Where was that done?
- 8 A. Same process I got through telling you, from the third
- 9 through to the mills. Instead of going into tanks, as
- 10 a paste, it was packaged off in five-gallon cans or
- 11 tanks.
- 12 Q. It was used to tint or shade --
- 13 A. Shade.
- 14 Q. -- the paints?
- 15 A. Right.
- 16 Q. I think I forgot to ask you. The other lead that was
- 17 used as a pigment, what form did that come in or what
- 18 compound was that?
- 19 A. That came as red lead or white lead powder. And for a
- 20 period of time there was a lead paste that was also
- 21 brought in.
- 22 Q. Was that a lead oxide of some kind?
- 23 A. Lead oxide.
- 24 Q. In the case of both the red and white?
- 25 A. No. Not -- white came in as a paste. Part of the time
- 26 it also came in dry. And red lead always came dry.
- 27 Q. Were both of those leads oxides?
- 28 A. They are both oxides.

1 Q. And the zinc, in what form did that come?

2 A. They came in 50-pound bags dry.

3 Q. Was that a zinc oxide?

4 A. Yes.

5 Q. The mills on the second floor, were they cleaned out
6 periodically also?

7 A. They were cleaned out after each and every batch. You
8 normally would flush material through or just wash them
9 down afterwards.

10 Q. So, cleaning those was a different process than from
11 cleaning of the mixing tanks?

12 A. The mixers were not cleaned.. They were scraped out or
13 cleaned maybe once or twice, three times a year,
14 depending what they were. The mills were washed down
15 after every batch.

16 Q. Was that material less viscous or was it something that
17 was possible to wash down as opposed to the mixing tanks?

18 A. No. Mills had to be kept clean. They had to be kept
19 clean because you are changing from one product to
20 another and you -- it was a matter of proper operation
21 with clean equipment.

22 Q. Was that with water they were washed down?

23 A. If it was a water product.

24 Q. Otherwise --

25 A. It would be solvent.

26 Q. Solvent?

27 A. Yes.

28 Q. What would they do with the washings then?

T-4

1 A. In the case of solvents it was collected in drums and
2 sent out. It would collect down in the first floor,
3 collected in drums. We had drums around us, around
4 the different levels, and whenever anyone had any
5 washings, they would wash into the drums. When the
6 drums were filled, they would go out for recleaning.

7 Q. How did they get the washing out of the mill is my
8 question.

9 A. Same way they got paste go through the mill. The paste
10 runs out with water or solvent, would run out the same
11 way except you collect it.

12 Q. Down at the first floor you collect it?

13 A. No. No. You could do it all in the second floor.

14 Q. I see.

15 A. They had spouts, say, this high off the floor. You could
16 either run them all the way through the floor below.
17 You had the drum under it or whatever, but you could
18 collect directly off the mill in all cases.

19 Q. How high off the floor were the mills?

20 A. They were sitting on the floor, but they were, shall we
21 say, six to seven feet high, possibly, and the paste
22 tank which the paste came was four feet, something like
23 that, above floor level.

24 Those are roller mills. In the case of the
25 closed mills, with the pebble and ball, why, you could
26 flush through with the formula and clean the mill out
27 just by flushing additional thinners or varnishes that
28 were going to be part of the batch, anyway.

1 Q. When the material got to the tanks on the first floor
2 with their spouts, how was it then moved from the tanks
3 into the one-gallon cans or whatever the final container
4 was?

5 A. Tank spouts and outlets at the bottom of the tank, most
6 of those tanks were filled by a filling machine, and
7 the filling machines were portable. They could be moved
8 under the spouts of the tanks. Material was strained
9 into the filling machine which had its own small hopper,
10 and you would fill off in five-gallon cans, one-gallon
11 cans, quarts or what have you.

12 Q. Somebody had to operate the machine?

13 A. Oh, yes.

14 Q. It wasn't like a conveyor belt or something?

15 A. No. There were two operators on every machine.

16 Q. When the pigments were put into the mixing tanks, how
17 did they get from the storage area where they came in
18 off the street up to the third floor?

19 A. Some of them were in storage in Building 22 on the third
20 floor. Others that were down on the ground level were
21 brought up by elevator by pallet.

22 Q. They just moved them ^{from} into the pallets ^{to} or whatever the
23 tank was that was going to be used?

24 A. Yes.

25 Q. And be manually dumped into the tank?

26 A. That is right.

27 Q. I think you described them as a powder, is that correct?

28 A. That is correct.

- 1 Q. Was it a fine powder or a medium consistency?
- 2 A. It depended on the product. Some things were quite,
3 you might say, light and fluffy. For example, ^{black} lamp~~er~~,
4 all you got to do is look at it, and it is a puffball.
5 On the other hand, if you take lead that is quite dense
6 and heavy. It has nothing to do with the particle size.
7 It is just the specific gravity of the powder. The
8 things like clay were quite heavy. Titanian^{um}~~an~~ were quite
9 heavy. If you get into things like talc, they were
10 much lighter.
- 11 Q. But these are powders rather than what you call crystals,
12 for example?
- 13 A. There were no crystals. They are all powders.
- 14 Q. Would they open up the bag right at the tank there?
- 15 A. They would put the bag at the end of the tank and they
16 had a lineoleum knife which is a -- you know what a
17 linoleum knife looks like. Just rip the bag, empty it in.
- 18 Q. Is there an opportunity for some of that to spill out
19 or not get into the tank when that occurred?
- 20 A. It could. There is always a little bit. That is why
21 they swept up every day. There is always some dust
22 around. You couldn't avoid it.
- 23 Q. What about when the drums -- I think I am trying to
24 remember now. I think we talked about there were drums
25 of varnish that were also put in the mixing tanks.
- 26 A. Yes.
- 27 Q. Were they poured by a hoist, you said?
- 28 A. You lifted the drum up either with a hoist or put it on

1 the table of one kind or another level with the top
2 of the mixer. You put the varnish in first. And once
3 the varnish was in there, then when you put the powder
4 in, the mixer would be running and it would start
5 wetting out the powder at the time it was being put in.

6 Q. At what stage would the thinner be pumped in?

7 A. That would be put in along with the varnish. Liquids
8 are normally put in the mixer first and then the powder
9 is the last thing that goes in.

10 Q. Were there many different types of thinners used?

11 A. Yes. There were all kinds of thinners used.

12 Q. What were the principal ones?

13 A. Something referred to as good old mineral spirits is
14 probably the most common thing you buy in any store.

15 Q. Is that naphtha or naphthalene?

16 A. That is not the most common. Naphthalenes are, you might
17 say, of a higher solvency than your common run-of-the-
18 mill solvents.

19 Q. When the varnish was poured in, was there opportunity
20 for some of that to spill also?

21 MR. WEILL: Excuse me. Before we go on, can I
22 get the spelling of naphthalene?

23 MR. HOFFMAN: I think n-a-p-t-h-a-l-e-n-e.

24 THE WITNESS: That is a good guess.

25 Q. (By Mr. Hoffman) Was there opportunity for some of the
26 varnish to spill out that is put into the mixing tanks?

27 A. Not really. But there again, minor drippage is unavoidable.

28 Q. Is there any procedure for when this happens what would

1 be done?

2 A. Certainly. Clean up immediately.

3 Q. Right away?

4 A. Yes.

5 Q. Same in the case of the pigments?

6 A. Yes. Well, as soon as the batch was completed.

7 Q. What about the chutes that took the base from the third
8 floor to the second floor? Could they overflow or did
9 anything spill out the hoses that went to the floor?

10 A. No, not really. Well, there could be spillage on rare
11 occasions, but they were scraped down and then washed
12 down normally.

13 Q. But I mean was the flow ever such that some of it
14 spilled over the side, something of that nature?

15 A. Very seldom. They were high sided, about six inches
16 high, six inches wide so that the trough -- there was
17 a reasonable ledge. You could slow down the mill, anyway.

18 Q. How was it controlled, the feeding from the mixing down
19 through the chute?

20 A. There were gates with control handles. And down the
21 stairs where the mills were which controlled the gates
22 upstairs where the mixers were.

23 Q. So, the mill operator controlled the flow?

24 A. That is right.

25 Q. How about overflowing to the mixing tanks? Do they
26 overflow if somebody put too much of something in there?

27 A. They couldn't do that because they were there when the
28 thing was put. They put the powder and the liquids so

1 they couldn't overflow.

2 Q. What about the milling machines? Did they ever over-
3 flow in any way? If somebody made a mistake and let
4 too much of the material in, what would happen?

5 A. They couldn't do that either. You could overflow, but
6 they had pans for collecting that type of thing under-
7 neath the mills. It never got onto the floor. And
8 these pans would catch any overflow that did happen
9 and it would be cleaned up after the batches run through.

10 Q. What were the floors made of? Like on the third floor,
11 what was the flooring?

12 A. That was two by tens or two by twelves on edge with
13 steel plates on top of that for all aisleways, the
14 work areas.

15 Q. Any concrete?

16 A. Not on -- what buildings are we talking about?

17 Q. Again, on the third floor of 19 and 21.

18 A. No concrete.

19 Q. And the plates were in the aisleways?

20 A. The heavy-duty flooring that I told you about was
21 Building 21 and 22. Building 19 did not have the
22 heavy flooring.

23 Q. What type of floor was there?

24 A. Two by twelve, ten-inch center or what, I don't know.
25 Wood flooring on top of that, and then, of course, four
26 by eight steel plates on the aisleways and work areas.

27 Q. What about the second floor? Was it similar, the
28 flooring?

1 A. That was similar.

2 Q. And the first?

3 A. Similar.

4 Q. What I would like to do now is to ask you, if you could,
5 to give us as a starting point a kind of capsule
6 description of the varnish manufacturing process
7 similar to what you gave us for the paint process.

8 I think that will help us move along as rapidly as we can.

9 A. Before Building 5 was built, which was two large
10 reactors, varnish was made in open kettles. These
11 kettles were about 200 to 250-gallon capacity. And you
12 would add to these kettles hard resin such as rosin, for
13 example. And to that you would add oil which could be
14 linseed oil, safflower oil, tung oil, China wood oil.
15 These kettles are put on open fires and heated up to
16 450-500 degrees, maintained at that temperature for 15
17 minutes to maybe an hour, depending on what was being
18 manufactured.

19 Then they were removed when the reaction was
20 considered complete and solvents were added to it to
21 bring it to about 50 percent solids, and that was the
22 completed batch of varnish. Now, that is the way it
23 was originally made in all these fire hoses and stacks
24 that were there that were for that purpose.

25 Q. When you say "there," can you tell us which location
26 that is?

27 A. Well, that is your brick chimney right there, all that.

28 Q. In Building 6?

1 A. The varnish was, but not the litharge.

2 Q. Not the litharge?

3 A. Not the litharge I don't think because you had lead.

4 You had white lead. There was no need for litharge.

5 Litharge was used in varnish because it was more

6 reactive than other forms of oxide. That is why it

7 was found in the varnish department.

8 Q. Do you have any idea how much of the white lead would
9 have been used in the course of a year when two or three
10 million gallons of paint were produced?

11 A. I wouldn't want to attempt to guess that one. I wouldn't
12 want to attempt to guess that.

13 Q. How about red lead? Did you have any estimate of what
14 quantity it would take to make that amount of paint?

15 A. Couldn't possibly. Couldn't possibly begin to guess.
16 It varied from year to year because, as I say, in the
17 early years, why, lead was the favorite pigment for
18 exterior paints. And then it was gradually replaced by
19 others. And during the war years, you had red lead
20 primers go in the shipyard. They had all those things
21 happening. And from year to year, why, you never had
22 the same profile.

23 Q. What largely replaced lead as a pigment?

24 A. Titanium, zinc. Mostly titanium.

25 Q. Why did that occur, the replacement of the pigment?

26 A. Well, there was a growing feeling from the various
27 health agencies that lead was contributing to illnesses
28 amongst youngsters who were getting lead paint and chew

1 on it that were on porches or wherever it might be
2 applied. So, there was a growing feeling that lead
3 was not a good thing to have in products. And before
4 legislation was passed, they actually started phasing
5 it out. They did phase it out.

6 Q. When did that phasing out begin?

7 A. I can't give you a date on that one either.

8 Q. Were there any other concerns about lead other than
9 the instance of children eating the paint chips and
10 flakes?

11 A. That was the biggest concern that I seem to recall
12 hearing about.

13 Q. Was there any concern at the time during the time that
14 you were at the plant in regard to working around lead?

15 A. No.

16 Q. Were there any kind of special precautions taken as far
17 as the employees who worked with the lead?

18 A. People that worked on the mixing floor were all issued
19 respirators which were basically to keep them from
20 inhaling dust, which it is lead or talc or silicates
21 or anything, and these they were expected to wear all
22 the time. So, other than that, there was no special
23 precautions. There were certainly a safety committee
24 which attempted to see to it that things were kept
25 sanitary, encouraged the workers to be sure and wash
26 up after they got through work before they went to
27 lunch and things of that nature. Also before they
28 went home.

1 Q. (By Mr. Hoffman) Building 28. There was an entrance
2 then from 24th Street into the yard?

3 A. Used occasionally only.

4 Q. Other than the area you just described, were there any
5 other part of the property that sloped?

6 A. Obviously you had a different elevation between Rhode
7 Island and Kansas. You had quite an elevation change
8 between this corner and that corner of the property.

9 Q. You are saying between the corner of Kansas and 24th
10 rather than Rhode Island and 24th?

11 A. Right. The same onto 23rd. You were still on a slope.

12 Q. The property there was not level? It sloped from
13 Kansas up to Rhode Island?

14 A. Right.

15 Q. Getting back to the other question, do you know of any
16 excavation on the property that National Lead carried out
17 during the time that you were there?

18 A. That was for the buried tanks. That is the only thing
19 that I can think of.

20 Q. Did they dig up the sidewalk?

21 A. Yes.

22 Q. Do you know if any kind of permit was obtained in order
23 to do that?

24 A. I am sure there was a permit. I am sure there was a
25 permit. I don't think they could do that without a
26 permit.

27 Q. Whose job would it have been at that time to obtain a
28 permit if it was needed?

1 Q. Do you remember how you learned of the decision that
2 the plant was going to be closed?

3 A. How I learned?

4 Q. Who told you or whether you received a memo.

5 A. There was no memo. They had a meeting, this Ken Specht,
6 which you have a note of, plant superintendents and
7 managers from Seattle and Los Angeles and San Francisco,
8 they said they want to close it down. Just like that.
9 It was a timetable.

10 Q. How long did the timetable turn out to be from when
11 you were told and the plant was closed?

12 A. Close to around four to six months. I don't recall
13 exactly now. There were little things like phasing out
14 production, transferring production, notifying the
15 union, disposing of equipment and a lot of little details.
16 What do you do with all the people? We had salaried
17 people, laboratory facilities, supervision you had to
18 make up, all kinds of personnel problems to solve,
19 terminate, transfer.

20 Q. Were you overall in charge of that shutdown?

21 A. Sorry I was.

22 Q. Kind of sounds like --

23 A. It was not one of the pleasant jobs.

24 Q. Was any effort made to sell the plant?

25 A. I don't know that it was or not. Part of the reason
26 that there wasn't any effort made, I think, was that
27 we had notice from the City of San Francisco to vacate
28 the premises by 1980. Now, everybody was aware of that

1 and we knew we had to vacate the premises by then. It
2 caused us to comply with the notice we had.

3 Q. Do you know what the basis of that notice was?

4 A. It was residential zoning there. We were an industrial
5 operation in a residential zone, and I don't know how
6 much notice they gave us. It was 15 years or 20 years,
7 but it had been on notice for a long time and I -- if
8 my memory is correct, 1980 was the deadline to vacate.

9 Q. From the time you came there in 1942, was it always
10 residential along 23rd Street on the other side of the
11 street?

12 A. Yeah.

13 Q. And on the other side of Rhode Island was it residential
14 there?

15 A. Yeah.

16 Q. Exhibit A doesn't show 24th Street.

17 A. That was residential there also.

18 Q. On Kansas?

19 A. Well, you had the freeway down below.

20 Q. Was this there even in 1942?

21 A. I don't recall any homes in there. I don't remember
22 when they built the freeway.

23 Q. I thought it was in the fifties, but I am not certain.
24 I could be wrong.

25 A. I don't remember any residences down there.

26 Q. But I take it there wasn't any kind of industrial
27 operation either.

28 A. No.

1 Q. How long was the conversation?

2 A. Ten minutes. Fifteen minutes at the most.

3 Q. Mark the subpoena and the declaration as Exhibit 2.

4 (Whereupon a Civil Subpoena and
5 the Declaration in Support of
6 Subpoena Duces Tecum were
7 marked as Plaintiff's Exhibit
8 Nos. 2 and 3 for identification
9 only by the Notary Public and
10 attached hereto.)

8 Q. (By Mr. Hoffman) Mr. Marklin, would you look at what
9 has been marked as Plaintiff's Exhibit Number 2? Could
10 you tell me if you received a copy of that subpoena
11 from me?

12 A. Looks like what I received from you, yes.

13 Q. Did you also receive a copy of what has been marked as
14 Plaintiff's 3 which is the Declaration in Support of
15 Subpoena Duces Tecum?

16 A. Yes.

17 Q. On page 2, paragraph 2-A of that Declaration, there is
18 a description of some documents. Could you take a look
19 at that description and tell me whether you have any
20 documents that meet that description?

21 A. I have nothing in the way of documents, pictures or
22 otherwise relating to the premises there on 24th Street.

23 Q. Did you review any kind of documents at all in preparation
24 for this deposition today?

25 A. No.

26 (Recess.)

27 Q. (By Mr. Hoffman) I just have a few more questions.
28 Mr. Marklin, do you know of any operations by National

T-7

1 Lead during the time of the 1942 to 1970 period you were
2 at the property of any lead that could have been
3 introduced in any of the soils on the site?

4 A. I can't imagine how it got into the soil in all honesty.
5 I would have to stop and say how could it happen, and
6 I can't visualize how it could happen.

7 Q. Is there any aspect at all of the materials handling
8 that you described for us today that could have resulted
9 in lead being introduced into the soils?

10 A. The only thing that I can think of is that because
11 Heuter who operated the plant from 1878 to 1927, they
12 primarily started their paint business by buying lead
13 from National Lead Company and making lead products.
14 Now, my understanding of the history is that the varnish
15 department started originally, then Heuter came along
16 and wanted to introduce paint also. He then started to
17 buy lead from National Lead and make lead products. And
18 I recall one of the pictures I saw of 23rd Street and
19 Kansas, I believe, looked like they were still dirt roads,
20 and these buildings were put together topsy-turvy,
21 piecemeal. I think as the plant grew there was a lot of
22 lead handled, I think, by Bass Heuter, and I think that
23 there wasn't much paving in those days.

24 Now, when paving came in, what was done or how
25 it was done, I can't answer that. I don't know. But I
26 could visualize that working under those primitive
27 conditions, if you want to call it that, could very
28 easily have spilled materials around the place.

1 Q. These old pictures of the Bass Heuter plant, where did
2 you acquire those, do you recall?

3 A.. Found them when I moved into the manager's spct. I
4 found them in the files. They had been buried there
5 for God knows how long, all brown and faded.

6 Q. This was in 1966 when you took that job?

7 A. About that.

8 Q. From whom did you learn the history of the site when
9 Bass Heuter had it?

10 A. Well, I talked to other people on this. I talked to
11 our plant manager. He's the one that seemed to be right
12 up on the history -- not the manager of the plant. The
13 engineer seemed to be quite up on the history on some
14 of these things more so than I was.

15 Q. This is Mr. Moore?

16 A. Yes.

17 Q. Do you have an address for Mr. Moore?

18 A. Not with me.

19 Q. Is it possible you have one at home?

20 A. I have one at home.

21 Q. Would you be willing to supply that for us? You can
22 write a letter to Mr. Weill or me, however you choose.

23 A. To give you the address?

24 Q. I'd make that request, if you would.

25 A. (Witness nods head.)

26 Q. Was there anybody else that you learned of the history
27 of the site when it was in the hands of Bass Heuter?

28 A. Over time a lot of it went in one ear and out the other.

1 There was really no interest.

2 Q. Was Mr. Moore the one who told you about Bass Heuter
3 having bought lead from National Lead Company?

4 A. Well, I knew that that was the case because there were --
5 used to have relics all over the place, Bass Heuter
6 label cans, that type of thing. Bass Heuter labels
7 that was manufactured by Bass Heuter, we used to have
8 them around as a display at one time. That is the reason
9 that National Lead bought the place in the first place,
10 because lead paint was being made and lead was National
11 Lead's business at that time. So, it was compatible.

12 Q. National Lead, were they not in the paint business before
13 they bought the San Francisco plant?

14 A. I don't think they were. I think the San Francisco
15 plant was their entry into the paint business.

16 Q. Let me be sure I understand. Bass Heuter, as you under-
17 stand it, was buying lead from National Lead in the same
18 way that National Lead later bought lead from itself to
19 use in paint manufacturing?

20 A. Yes. Is my understanding.

21 Q. Do you know whether the San Leandro facility existed
22 at that time?

23 A. I don't know when that thing started.

24 Q. Is that operational today?

25 A. I don't think so.

26 Q. Do you know when that was closed down?

27 A. No, I don't.

28 Q. Was that a distribution facility of some kind or --

1 A. It was a manufacturing point for lead oxides and battery
2 oxides.

3 Q. What division of National Lead would that have been
4 under?

5 A. They had several facilities for processing lead, every-
6 thing from recovering lead from batteries to taking lead
7 and converting it to oxides. And I am trying to think
8 whether they call it the lead division or the metals
9 division. Whichever it was, I am not sure now.

10 Q. At San Leandro did they receive the lead as some kind of
11 primary metal and then convert it into oxide?

12 A. Yes.

13 Q. Did National Lead have lead mines or lead properties
14 that it controlled?

15 A. They had mines. Whether they were lead mines, I am not
16 sure. They had a regular mine division, I know.

17 Q. Again, when you told us about Bass Heuter, I asked
18 whether there were any aspect of the materials handling
19 by National Lead that you know of that could have
20 resulted in lead being introduced into the soils at the
21 site.

22 A. No. I can't think of anything in the way of handling
23 that would be a contamination.

24 Q. What about zinc, if I asked you the same question?

25 A. Same thing would apply.

26 Q. In any of the buildings on the site do you know of any
27 conditions which could have resulted in lead or zinc or
28 other metals going through the floors of the buildings and

1 into the soil in that fashion?

2 A. No, I can't. But then you must remember that there has
3 been powder pigment handled in that area for close to
4 90 years or so. There is no way of imagining all the
5 things that could have happened. All I can say is what
6 I know happened. I don't know of any way it could
7 happen other than if you want to talk about dust
8 accumulating over 90 years, why, you are going to have
9 an accumulation. It will include not only lead. It will
10 include everything, include clays and talcs and titaniums.
11 And it wouldn't be limited to just lead.

12 Q. This would be inside the buildings as well as outside?

13 A. Yeah. Well, the outside, you do have rain and that
14 washes things down. And we did have housekeeping interior.

15 Q. But could some of it have been absorbed into the bricks
16 and other materials that the buildings are made of?

17 A. How much could you absorb in the bricks?

18 Q. And the wood? It could absorb in the wood of the
19 building?

20 A. Again, how much can absorb there? All you can do is
21 sweep up. You can't go soaking wooden floors. Even if
22 you did, there is no indication that you would remove it.
23 You can just clean up as best you can, sweep up. And,
24 of course, we did vacuum regularly.

25 Q. Do you know whether National Lead ever owned Bass Heuter
26 at any time?

27 A. No. I don't know. When they first bought it, they may
28 have retained the Bass Heuter name for a period of time

1 I believe that they did use the Bass Heuter label when
2 they first acquired the operation. That preceded the
3 Dutch Boy label, and for a while I think they used both
4 labels.

5 Q. Were the Bass Heuter labels used at any time when you
6 were there beginning in 1942?

7 A. I don't believe they were.

8 Q. Did you say earlier there were some containers or some
9 things that you saw around the property with Bass Heuter
10 labels?

11 A. Yes. There were some labels laying around. I think they
12 were stuck in some corner, one place or the other.

13 Q. I want to show you that. It comes from the EIR.

14 Could you mark that.

15 (Whereupon eight pages of documents
16 entitled CHEMICALS FOUND ON
17 PROJECT SITE were marked as
18 Plaintiff's Exhibit No. 4 for
identification only by the Notary
Public and attached hereto.)

19 Q. (By Mr. Hoffman) Mr. Marklin, I've handed you what
20 has been marked as Exhibit 4 which is a portion of the
21 EIR that was prepared by the Bendix firm people that you
22 had a discussion on the telephone with. I just want to
23 ask you about some of the items on that list.

24 Just for your reference, this is a list of
25 materials that were found on the site, on the property
26 site, in 1980 at the time it changed hands from Synanon
27 to 2222 Limited, which is the organization for which
28 Mr. Kaplan is the Receiver.

1 Q. What about the Dowtherm reactors? Were they sold?

2 A. That was sold. Reactors were sold. All the open
3 kettles were sold. There were still some small
4 manufacturers, I believe, down in the Peninsula that
5 did that type work. I don't recall who they were now,
6 but at that time I remember I was surprised that someone
7 would be interested in kettles.

8 (Whereupon a one-page document
9 entitled TOXICITY OF TYPICAL
10 INORGANIC PAINT PIGMENTS was
11 marked as Plaintiff's Exhibit
No. 5 for identification only by
the Notary Public and attached
hereto.)

12 Q. (By Mr. Hoffman) Mr. Marklin, let me show you another
13 portion of the Environmental Impact Report, page 176,
14 which is a list of some paint pigments. What I want to
15 do is just ask you which of those were used by National
16 Lead in its operations on the property. The first one,
17 I guess we know the answer. That is litharge or lead
18 oxide. That was used, is that right?

19 A. Yes.

20 Q. The second one shows a common name of orpiment, and the
21 chemical name is arsenic trisulfide. Was that compound
22 used, to your knowledge?

23 A. I can't -- I can't identify its end use or I can't
24 identify it as something we had purchased and had on the
25 premises even.

26 Q. The next one is a copper compound with a common name of
27 Paris Green, and I am not even going to attempt the
28 chemical name. I will let the exhibit speak for itself

- 1 A. I recognize that, yes.
- 2 Q. In what form was that used?
- 3 A. That is a powder.
- 4 Q. Was it a pigment?
- 5 A. Yes.
- 6 Q. Used for coloring?
- 7 A. I believe that may have been one of those that was used
- 8 for bottom paints for bolts, specialty pigment.
- 9 Q. Next they show Realgar, which is an arsenic disulfide.
- 10 Was that compound used?
- 11 A. I don't identify it as to where it was used. I don't
- 12 really recognize it.
- 13 Q. Cadmium yellow, I think, is cadmium sulfide. I think
- 14 you testified this morning that was used to some degree.
- 15 A. Yes.
- 16 Q. The next is cadmium red which is cadmium sulfide/cadmium
- 17 selenide mixtures. Was that used?
- 18 A. I don't recall. But I suspect that we did. We had^o at
- 19 one time just about every color pigment that was ever
- 20 made in the plant at one time or another.
- 21 Q. All right. Then next is lead chromate, chrome yellow.
- 22 I think you said that was used.
- 23 A. Yes.
- 24 Q. And then red lead is another form of lead oxide, and
- 25 that also was used?
- 26 A. Yes.

27 MR. HOFFMAN: I think that is all I have.

28 ///

1 A. To the best of my knowledge, it is used everywhere.
2 Nothing has changed with zinc. All I can say is I have
3 been away from it now for four and a half years. I don't
4 know what they may have come up with or changes they have
5 made. I can say of what I know now or knew of when I
6 left. They are always changing regulations.

7 Q. On one point, you testified in response to a question
8 by Mr. Hoffman about wash water occasionally being put
9 in sewers.

10 A. Yes.

11 Q. Now, what did that refer to? What kind of material would
12 you end up with wash water?

13 A. That would be the water based products.

14 Q. Only water base products?

15 A. Yes.

16 Q. Based upon your knowledge today, do you believe that
17 NL did anything improper in its handling of chemicals
18 during the time period 1942 to 1970 in the San Francisco
19 paint factory?

20 MR. HOFFMAN: I object to the form. It is
21 irrelevant what he believes.

22 Q. (By Mr. Weill) You can go ahead and answer it.
23 He just put an objection on the record.

24 A. No, I don't know of anything that we've done wrong or
25 would have done differently.

26 Q. That was actually a separate question I was going to ask
27 you. Looking back today can you think of any practices
28 NL had in regard to handling the chemicals that you wo

1 have done differently during the period from 1942 to
2 1970 at the San Francisco paint factory?

3 A. Not that I can think of. All reasonable precautions
4 were taken in handling anything that was known to be
5 hazardous. Anything that were identified to be hazardous
6 now weren't identified then. It is possible you might
7 pay a little more strict attention to, shall we say,
8 respirators and cleanup that you may have been a little
9 bit lax on at that time. That is the only difference.

10 MR. WEILL: I have no further questions. Thank
11 you, Mr. Marklin.

12 FURTHER EXAMINATION

13 By JOHN D. HOFFMAN, Esquire, Counsel on behalf of the Intervenor
14 STUART M. KAPLAN:

15 Q. I just have some brief reply.

16 Mr. Marklin, did the term lead poisoning mean
17 anything to you during the 1942 to 1970 period that you
18 were with National Lead?

19 A. It didn't enter into our vocabulary in anything in
20 paint manufacturing.

21 Q. At that time were you aware that it was possible for
22 someone to suffer ill effects from lead by breathing
23 fumes or dust or anything of that nature?

24 A. I had heard that there were some problems in the lead
25 industry, but not in the paint industry.

26 Q. When Mr. Weill was asking you some questions, he was
27 reading from a letter, another paper that he had. Have
28 you ever seen that paper?

- 1 Q. During what period was that?
- 2 A. For a couple years preceding the shutdown.
- 3 Q. The 1970 shutdown?
- 4 A. Uh-huh.
- 5 Q. Why did you call Mr. Stubb?
- 6 A. I wanted to refresh my memory on the disposal of
- 7 materials.
- 8 Q. Did you talk to him about the disposal practices that
- 9 were used when the plant was in operation?
- 10 A. He confirmed what I already believed.
- 11 Q. And that was?
- 12 A. About the disposition of wash solvents and wash waters.
- 13 Q. When he was the plant manager was he in charge of the
- 14 disposal operations?
- 15 A. Yes.
- 16 Q. Reporting to you?
- 17 A. Yes.
- 18 Q. When you became the -- is it production manager?
- 19 A. Yes.
- 20 Q. Did you put in some improvements in the cleanup and
- 21 disposal procedures at that time?
- 22 A. I don't think anything was changed.
- 23 Q. Did you yourself at any time ever direct any changes
- 24 be made in the cleanup and disposal procedures?
- 25 A. No.
- 26 Q. I think you testified earlier there were some areas
- 27 that were in need of improvements as of an earlier time?
- 28 A. I would say not any question of disposal, just as a

1 matter of housekeeping mostly.

2 Q. What areas are those that you would improve?

3 A. I would say the wash department just more or less,
4 sweep up, orderliness in terms of where materials were
5 stored, neatness basically.

6 Q. Was it you that put those new procedures into effect?

7 A. Yes. I would say that.

8 Q. When was that?

9 A. When I got in there, sixty, whatever it was. '63, '64,
10 '65.

11 Q. Did you talk to Mr. Stubb on the telephone?

12 A. Yes.

13 Q. How recently was that?

14 A. This morning.

15 Q. It was just on that one occasion you talked to him
16 recently?

17 A. Yes.

18 Q. About how long did you talk to him?

19 A. Five minutes.

20 Q. When was it you collected the pictures and materials
21 that had to do with the earlier days of the operation of
22 the plant?

23 MR. WEILL: Let me just insert an objection to
24 the form. That is beyond the scope of the cross. You
25 can go ahead and answer.

26 THE WITNESS: I don't recall the date. I really
27 don't.

28 Q. (By Mr. Hoffman) Was it when you were still at the San

SUPERIOR COURT OF THE STATE OF CALIFORNIA

FOR THE CITY & COUNTY OF SAN FRANCISCO

THE SYNANON CHURCH, :

Plaintiff, :

NO. 804196

v. :

FOXCROFT ASSOCIATES, a
Partnership; RANDALL P.
BAUKNEY; STEPHEN P.
BEREZIN; JOSEPH SKIFFER;
and DOES 1 through 10
inclusive,

DEPOSITION OF:

: KENNETH C. SPECHT

Defendants. :

FOXCROFT ASSOCIATES, :
etc., :

Cross-Complainants, :

v. :

THE SYNANON CHURCH; N.L.
INDUSTRIES, etc., :

Defendants. :

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EXHIBIT 4

A That was a separate division.

Q So your positions, I take it, were in the paint division?

A Yes.

Q Was that the name of it?

A Yes.

Q What was the division that handled the sale of the pigments?

A The pigments division.

Q Did you ever work at any time in the pigments division?

A No.

Q During the 1944 to 1947 period, in addition to the San Francisco facility what other paint production facilities did NL have on the West Coast?

A It had a plant in Seattle. I believe I am correct in that statement. That was known as the Schorn plant.

Q Were you in charge of sales from that plant as well then?

A I was in charge of industrial sales in eleven Western states and Alaska.

Q Did you ever hear of a company called the Bass Hueter Company?

A I am very familiar with it. The company bought that plant out in the late twenties.

Q That is, NL Industries bought it?

A National Lead or NL Industries bought it out in the late twenties. That was before I joined them but that was the story that I heard.

Q Was that the San Francisco plant you were referring to?

A Yes.

Q When you were working at NL especially during the early years did you ever meet anyone working for NL who had worked for Bass-Hueter before that?

A Most of the people that I had worked with had worked for Bass-Hueter.

Q Was that during the first period that you were stationed in Los Angeles?

A Yes. We sold Bass-Hueter paint. The paint that we sold was sold under the Bass-Hueter label, the bulk of it.

Q Was that formulated in the same manner that Bass-Hueter had formulated it previously?

A With some modifications.

Q Do you know how long that continued that paint was sold under the Bass-Hueter label?

A I can't give you an exact answer on that. The company, NL Industries, began broadening their market in the East and they manufactured a very simple line of white paint products which were called Dutch Boy under a different label and we began to shift from Bass-Hueter because of the advertising of the Dutch Boy lead and Dutch Boy products to the Dutch Boy label gradually by imprinting a small Dutch Boy on the Bass-Hueter labels, Bass-Hueter paints manufactured by the makers of Dutch Boy.

Q Dutch Boy was an NL trademark, I take it?

A Yes.

Q Had NL Industries been in the readymade paint business before Bass-Hueter was acquired?

A Not that I am aware of.

Q Did you ever learn from anyone how long Bass-Hueter had operated at the San Francisco location before NL bought them out?

A Rumor had it and the story which I had reason to believe was that Hueter started to manufacture varnish in a shed adjacent to his house on the northwest corner of the property in the eighties, perhaps 1885 or thereabouts.

Q That's 1885?

Specht- direct

A Yes.

Q Did you ever learn from any source when paint was first manufactured at the property?

A I can't give you the exact date. Again this was hearsay or just knowledge I picked up. Hueter apparently had learned the trade in Germany or some other place, was successful, he was joined by a paint man by the name of Bass, hence, the Bass-Hueter name, some time after he began operation and from this original shed they began expanding, buying lots and acquired the block and put up or built the Bass-Hueter factory and company.

Q Do you remember the names of any of the persons or the sources from which you learned this information about the Bass-Hueter Company?

A It was common knowledge amongst the old-timers. I don't remember. I don't recall.

Q I have a few names of some people here. Let me see if they jog your memory as being among the people that were associated with Bass-Hueter that you may have met in the early years. There was a Mr. R.P. Prentys.

A Yes. He was the manager.

Q He was the manager of the San Francisco facility?

A Of the Coast.

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the office building in which I assume you worked?

A Yes.

Q That's in the southwest portion of the site, correct?

A Yes. I would assume as it says here the paint factory was located here.

Q You are pointing now to the building that is marked Number 21 in the southeast portion of the site?

A Yes.

Q Were there pigments containing lead that were used in the paint production process?

A Yes.

Q Were those pigments supplied by the pigments division of NL Industries?

A Yes.

Q Were there also pigments containing zinc that were used in the paint production process?

A Yes.

Q Were those supplied by NL?

A No. As far as I know they were purchased out from New Jersey Zinc or a zinc manufacturer.

Q Were there lead chromates used as pigments?

A Yes, for thinning colors.

Q Did NL supply those?

Specht- direct

A No. They were purchased out.

Q Were there pigments containing lead used in the varnish production process?

A I don't know that you would call it a pigment but we used lead manganese and this would be in small quantities, reactors for dryers.

Q That was in the varnish production process?

A Yes.

Q That was lead --

A Manganese dryers.

Q Was there a lead oxide called litharge?

A Yes.

Q Was that used in the varnish production process?

A Not that I am aware of.

Q Was it used in paint production?

A No.

Q Was it used in some manner in the San Francisco facility?

A I am not aware of its being used. Litharge was used primarily in battery oxides.

Q Was the varnish that was produced at the San Francisco facility used in the paint production process as well?

New York, Boston, Massachusetts, where lead had been used on interior finishes it was one of the prime components of the old-fashioned paints, as the plaster lost its gauge or had become loosened and began to fall in the tenements, little chunk of plaster would fall coated with many coats of lead paint and it was ingested by small children, babies and whatnot, and there was a big to-do about infants being infected with lead poisoning after eating fallen plaster in Brooklyn, Boston and all the slum areas.

Q During the time you were stationed on the West Coast, that is, up until 1950, was lead considered a hazardous material in any way?

A No, except if it was ingested. People who sprayed lead were required to use respirators so that they didn't breathe it in.

Q Were there any materials again during the period up through 1950 used in the paint production process that were considered hazardous materials at that time?

A I can't put a date on it but mercury, which was used as a fungicide, was considered or was in the process of being considered as a toxic material and mercury came into popular use as the water paints, latex paints

became popular.

Q Referring now to the San Francisco facility were the lead pigments added to the paint mixed by hand in the production process?

A Well, it was used in two forms. One was in dry powder and the other was in liquid paste. A good part of ours were added as paste because we were making paste in Melrose but some dry powder might have been used.

Q The paste, was that shipped in drums?

A Yes.

Q Then how was that actually physically added to the paint mixture when it arrived in San Francisco?

A It was dumped in.

Q And that was into a mixing tank?

A Yes.

Q Was the same also true of the powders, that they were dumped in?

A Yes, as far as I know. I am no authority there. I didn't spend a lot of time on the mixing floors. I had other things. Production wasn't my deal.

Q I see. Well, in the course of that production process as you understood it at San Francisco were there opportunities where some of the lead pigments could have been spilled inside the plant by the handling

of them?

A Oh, yes, that was always a possibility, but we had a very neat plant and it was vacuumed and it was swept up and it wouldn't be allowed to stay. The floors, as I recall, when I would go through them were clean. They were swept every day or they were vacuumed. It was a clean operation.

Q Were they washed? Were the floors washed up in some way?

A Yes.

Q Would they do that with ordinary water or solvent?

A Water normally.

Q What did they do with the wash water then, do you know?

A Well, no, I don't know exactly. I think that if it had any body or any amount it was stored outside and it was hauled away in drums to a dump.

Q Was there a loading dock or a deck that you recall there where some of those drums were stored before being moved off of the property?

A My memory is hazy on that. I don't recall.

Q What about the varnish? How was that added to the paint mixture?

Q Are you still employed as a consultant or in any capacity like that?

A No.

Q Do you have a pension from NL?

A Yes.

Q What was the name of the man who replaced you when you retired?

A Schultz.

Q Is that Walter Schultz?

A Yes.

Q Does he still work for NL, do you know?

A No.

Q Do you know where he is located at present?

A No, I don't.

Q Did Mr. Marklin ever report to you at any time that he worked for NL?

A I assume indirectly he did, yes, when I was made general manager.

Q Was he the Pacific Coast ^{Production His} manager at that time?

A Yes.

Q Did you participate in any way in NL's decision to shut down the operations at the San Francisco facility?

Specht- direct

43

A Yes.

Q What generally was the nature of your involvement?

A I shut it down.

Q Did you recommend that to someone or was that an action you were able to take on your own?

A No. I recommended it to the president of the company.

Q And who was president then?

A I think J. M. Martino or it could have been E.R. Rowley. I don't remember exactly.

Q Was Los Angeles still operating at that time?

A Yes.

Q Was Seattle still operating then?

A Yes.

Q Why did you recommend that the San Francisco facility be shut down from production?

A It was a labor-intensive plant and as you can see by the drawings we had no railroad spur, which meant double handling.

Q By that you mean they had to truck materials to another railroad spur location?

A To our railroad spur, yes.

Specht- direct

44

Q Was there another warehouse that NL had in San Francisco?

A Yes.

Q Did that have a rail spur?

A Yes.

Q Was that the one at I think Kansas and Marin Streets?

A Yes, Army Street.

Q That was strictly a warehouse?

A Yes. I had shut or caused the lacquer plant that we had there to be shut down earlier and we leased that to Thompson Lacquer Manufacturing.

Q When did that shutdown occur?

A Of the lacquer plant?

Q Correct.

A That was during the war, I think when I was in San Francisco, if I remember correctly.

Q You had also recommended that that be shut down?

A Yes.

Q Was that a recommendation to higher authorities in the company or was that an action you were able to take yourself?

A To higher authorities in the company.

Specht- direct

45

Q On the Pacific Coast or on the East Coast?

A The Pacific Coast.

Q Why did you recommend the shutdown of that facility?

A Inefficiency, labor-intensive, low volume.

Q Other than the labor-intensive aspect of the paint production facility were there any other reasons that caused you to recommend that it be shut down?

A We had a 13-week strike and we found that we could produce enough paint to satisfy the needs by working overtime at a lower cost in the Los Angeles plant which was modern and efficient.

Q When did that strike occur?

A Shortly before we shut it down.

Q Do you recall when it was that production stopped in San Francisco?

A No, I can't give you the exact date.

Q The disposition of the property from NL to Synanon occurred in the latter part of February 1971. If I give you that date does that help you remember when production stopped?

A Yes. I would say it had been shut down

perhaps a year before then.

Q At the time you made the decision to shut down the plant was there some limitation on NL's future use of the property?

A Yes.

Q What was that, to your recollection?

A I don't recall. We had three or four years to go. We had been given a 50-year -- and again I didn't see the figures but my understanding was we had been given a 50-year grace period to operate when it was zoned for residential. That expired in 1973 or 1974, something of that nature. I don't recall. There might have been a possibility of renewing it.

Q Was that limitation a factor in your decision also?

A I had considered that but the strike and the high cost to produce at the plant was the primary concern. The other was minor, just background.

Q Were there any considerations having to do with possible air or waterpollution that came into play in deciding to close down the plant?

A No.

Q To your recollection had the plant ever been cited in any way with respect to air pollution?

Q At the time the property was disposed of to Synanon was there any consideration given to the possibility that there might be lead residues on the property at some place, either in the buildings or the soil or somewhere else?

A It was very clean.

Q Were there any tests of any kind made on the buildings or the soils to determine whether there were any such residues?

A I was not aware of any.

Q What about zinc? Was zince considered in any way to be a hazardous substance at that time?

A No. There were no restrictions on zinc that I am aware of.

Q Are you familiar with the chimney or what is sometimes referred to as the incinerator on the east side of the property?

A No, sir, I am not.

Q Let me just show you on Exhibit 1 that facility I am referring to which is called a brick chimney, 48 feet high. Do you remember that?

A No, I don't.

Q At the time the property was turned over to Synanon were there any products of the combustion used in the varnish manufacturing process that were considered

hazardous, to your knowledge?

A I am not aware of it.

Q Have you ever heard of something called
polyaeromatic hydrocarbons or PAH's?

A No.

Q Did any of the Synanon people ever ask any
questions about the substance that had been used in the
paint manufacturing process?

A Not of me.

Q Did they ask how long or how intensively
the property had been used for that purpose?

A No.

Q When it was turned over to Synanon did
you know of anything at all about the property that might
limit its use for the purposes that Synanon described to
you?

A No, I did not. Their primary concern as they
expressed it to me was to get the office building for
apartments and whatnot in which people worked during the
day as a headquarters.

Q Was there any demolition at all carried
out by NL before the property was turned over to Synanon?

A I can't answer that. I am not familiar.
There was perhaps some done in connection with removing

MR. BRONNER: All right.

MR. HOFFMAN: Mark this P-3.

(Document marked Exhibit P-3 for identification.)

Q Mr. Specht, I have handed you two documents the top one of which is dated -- both are marked together as P-3 and the top one is dated November 7, 1968 and it appears to be a copy of a letter that you wrote to Mr. Mesick.

A Yes.

Q Do you recognize that as a copy of your signature at the bottom of the page?

A Yes, I do.

Q Is that a copy of a letter that you wrote to Mr. Mesick about that date, November 7, 1968?

A I believe that it is.

Q The second document attached which I haven't asked you to read word for word because it is lengthy and has very small print, is entitled "Notice of Future Expiration of Period of Permitted Continuance of Non-Conforming Status", and it is dated October 29, 1968 on the letterhead or stationery of the City Planning Department of the City of San Francisco.

Is that a copy of the notice from the Department of

City Planning that you referred to in your letter to Mr. Mesick?

A It appears to be.

Q Is that the notice to which you referred earlier which had to do with a limitation on the period of time during which NL could continue to operate its manufacturing facilities on the property?

A Yes.

MR. HOFFMAN: Mark that P-4.

(Document marked Exhibit P-4 for identification.)

MR. HOFFMAN: By the way, can we stipulate to the use of copies at this deposition without thereby making any stipulation about the trial? I hadn't asked that.

MR. BRONNER: Certainly. We have conspicuously avoided challenging the authenticity of the documents also.

MR. HOFFMAN: Well, that's right. Most of these were produced as copies by NL.

MR. BRONNER: Yes.

MR. HOFFMAN: I assume it is for that reason that that question is not raised.

MR. BRONNER: Yes.

-----x
FOXCROFT ASSOCIATES, a California General
Partnership; RANDALL F. BAUKNEY;
STEPHEN P. BEREZIN; and JOSEPH SKIFFER,
JR., as individuals,

Cross-Complainants,

-against-

THE SYNANON CHURCH; NL INDUSTRIES, INC.,
a corporation; and DOES I through C,
inclusive,

Cross-Defendants.

-----x
STUART M. KAPLAN, Receiver for 2222 Ltd.,
a California Limited Partnership,

Intervenor.

-----x
DEPOSITION of THOMAS P. MESICK, taken
before Marlyn Rudolph, C.S.R., Notary Public
of the State of New York, held at the offices
of NL Industries, 1230 Avenue of the Americas,
New York, New York, on June 5, 1985, at 10:45 a.m.,
pursuant to Notice and Agreement.

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EXHIBIT

5

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1
2 to the Synanon Foundation; is that correct?

3 A Yes, sir.

4 Q Between the time that you received Exhibit 1
5 from Mr. Specht in 1968 and the later time that the donatio
6 was made to Synanon, do you recall yourself having any
7 involvement with this particular property?

8 A I believe that Kenny Specht consulted some
9 real estate brokers to get an idea of the appraisal. He
10 was contemplating suggesting to the board of directors
11 that it be sold.

12 Q Did you yourself have any part in the decision
13 to terminate the use of the facility? I am making a
14 distinction between terminating the use on the one hand
15 and deciding what to do with the property on the other
16 hand.

17 My question is whether you had anything to
18 do with the decision to terminate the use of the property.

19 A No, sir.

20 Q How did NL make contact initially with the
21 Synanon Foundation?

22 A In talking with Mr. Specht from time to time
23 as to, one, selling the building, and as to, two, donating
24 it to a charity, the feeling was that it might be better
25 all around, A, for the company to donate it and, B, at

1
2 the same time to have a charitable institution use it
3 for their purposes.

4 My recollection is that Kenny Specht thought
5 of Good Will, that is the name that comes to my mind.
6 I don't know much about that.

7 I believe I was the one who said I read about
8 Synanon on the West Coast and I know of a case of a young
9 man who is involved there, why don't we or why don't you,
10 Kenny, talk to a man named Dederich who was the head of
11 it at the time.

12 I believe that was the genesis of how Synanon
13 got into the picture.

14 Q Did you make contact with Mr. Dederich?

15 A No, I did not. From that point on Kenny
16 Specht did whatever was done with regard to talking to
17 the Synanon people.

18 Q You said that it was considered better to
19 donate the property as opposed to selling it. Was it
20 considered that it would be more advantageous financially
21 to the company?

22 A Of course.

23 Q Why was that, sir?

24 A Because we had a tax deduction for the donation
25 of the property.

1
2 Don't misunderstand, it was not a major
3 consideration because it was the better way to handle
4 it all around plus the feeling that we should give it
5 to a charitable institution.

6 Q I take it, then, that the value of the poten-
7 tial tax deduction was judged to exceed what could be
8 realized in the event of a sale of the property?

9 A That is true.

10 Q Getting back to the nonconforming use designa-
11 tion, did NL ever challenge that in any way?

12 A No, sir.

13 Q Was that matter ever taken up, to your knowledge
14 with the City and County of San Francisco?

15 A No, sir.

16 Q To your understanding, did that designation
17 have an adverse effect on the market value or potential
18 sale value of the property?

19 A My opinion is that it did, yes.

20 Q In what way?

21 A Whatever the zoning was, the company could
22 only use it for ten years, I believe, and --

23 Q Exhibit 1 indicates a date of, I think,
24 May 2, 1980?

25 A Right. We were reconciled to the fact that

1
2 representative on that occasion of whether NL's former
3 uses of the property as a manufacturing facility would
4 limit Synanon's future use of the property in any way?

5 A No, sir.

6 Q When you were there on that date, did you
7 notice whether there were any materials in drums or other
8 containers stored around the premises in any place?

9 A No, sir, I did not. As I say, it looked
10 quite clean to me. They were ready to move in. I think
11 they started moving in right away.

12 Q Did you go through that part of the premises
13 that had actually been the site where paint was manufactured
14 by NL?

15 A I was just on the general premises. I could
16 not identify any particular site.

17 Q Do you know whether NL made any effort to
18 determine at the time of this transaction whether the
19 premises had been contaminated in any way as a result
20 of the previous paint manufacture?

21 A It was not in anybody's thoughts.

22 Q There was no discussion of that subject within
23 NL itself of possible contamination?

24 A There was certainly no discussion by anybody
25 that I knew and certainly nothing between the lawyers,

2 Mr. Garrett and Sharon Green, Bob Burns and myself.

3 No discussion, no need for it.

4 Q To your understanding, was lead considered
5 a material with hazardous properties as of that time,
6 1971?

7 A There was no concept that lead was a hazardous
8 property with respect to this plant. It was just not
9 in anybody's thoughts any more than gold was in anybody's
10 thoughts which might be something under the earth in
11 San Francisco.

12 Q As of that time, February of 1971, had NL
13 ever disposed of, in any way, by gift or sale or any way
14 any other properties where it had formerly manufactured
15 paint?

16 A I don't recall, but it was company policy
17 to make donations, mostly in money, sometimes in paint
18 products. Real estate I have no immediate recollection
19 of. If there were donations of real estate, they were
20 fairly routine and had been approved by the executive
21 committee. That was a rule, real estate should receive
22 executive committee consideration.

23 Q Apart from donations, as of that time, do
24 you know of any former paint manufacturing facilities
25 that NL had disposed of in any way?

1
2 Q Mr. Mesick, did any Synanon people ever
3 come to visit you back in New York City after this
4 transaction?

5 A Yes, I believe there was a man named Ron Cook.

6 Q What was his function with Synanon at that
7 time?

8 A He was the treasurer --

9 Q I think comptroller?

10 A Yes.

11 Q Did you ever go back out to San Francisco
12 to see any of the operations of Synanon on the property?

13 A No, sir.

14 Q I show you what has been marked Exhibit 10,
15 which appears to be a copy of the grant deed by which
16 the property was transferred to Synanon on February 26,
17 1971.

18 (Witness perusing document)

19 Q Did you sign that grant deed on behalf of NL?

20 A Yes, sir, as secretary.

21 Q Were you authorized by the board of directors
22 to do that?

23 A Yes, sir.

24 Q Attached to that document, the last two or
25 three pages, there is another document that is not signed

1
2 by yourself but Mr. Specht testified was signed by him.

3 Do you recognize those three pages, that is, GNS000234
4 through 236, as an agreement entered into at the time
5 the property was conveyed to Synanon by NL Industries?

6 A I recognize it as an agreement by which Synanon
7 accepted the property and the deed.

8 Q Was the deed signed at Mr. Burns' office on
9 the 26th of February?

10 A Yes, sir.

11 Q Was this agreement that we have been referring
12 to also signed by Mr. Specht and Mr. Garrett at the same
13 occasion?

14 A I would have no doubt about it.

15 Q Subsequent to this donation, did NL ever make
16 any other donations of real estate to Synanon?

17 A I don't think so. I don't recall.

18 Q Do you recall at a later time there was some
19 correspondence concerning possible donation of a property
20 in Richmond, California to Synanon?

21 A Yes, there was some colloquy about that, but
22 I don't think it ever eventually happened.

23 Q What was the nature of that property, do you
24 recall?

25 A Richmond, California. That was a small place

1
2 Mr. King states, "A donation, assuming a value of \$750,000,
3 will net after taxes to NL \$375,000 in tax reductions."

4 Was it true, according to your understanding
5 at that time, that if the IRS valuation of \$750,000 were
6 accepted, that the donation would be worth \$375,000 to
7 NL in tax reductions?

8 A I would have no reason to doubt that. I had
9 not gone into the figures. That was not my province,
10 but I would have no reason to doubt what was the
11 recommendation as expressed here.

12 Q Was that statement based on the assumption
13 that NL was then in the 50 percent corporate income tax
14 bracket?

15 A Always was, yes.

16 Q Following that statement, Mr. King continues
17 and a series of figures are set forth and he states as
18 follows: "On the other hand, a sale at a price of
19 \$320,000 (the highest of Harrigan Weidenmuller appraisal
20 values) would net after taxes to NL \$142,000 as follows,"
21 and then those various figures are set forth.

22 To your understanding, was that statement
23 also correct, namely, that a sale at the highest appraised
24 value would net only \$142,000 in cash to NL?

25 A I would have no reason to doubt Harold's

1

2 computation.

3

Q Would the same be true, that is, to your
4 understanding, was it correct that donating the property
5 as opposed to selling it was worth approximately \$233,000
6 more to NL, that is, the difference between \$375,000 and
7 \$142,000?

8

A I think that is what the figures show, yes,
9 sir. I would like to suggest to you that what was
10 happening here in all of these supporting papers was the
11 following, which I am sure you will readily understand.

12 I had gone to the executive committee, who
13 were a group of expert businessmen sitting around the
14 table, and presented the idea originally that they would
15 have a tax deduction of \$1,350,000 donating this property.
16 As a lawyer, you will appreciate that when you settle
17 a case you have to set your client on the idea of taking
18 less money than he anticipated.

19

This is the purpose of my memorandum, which
20 is addressed to the members of the executive committee
21 prior to the executive committee meeting, and with this,
22 I hoped they would read and when we sat around the table,
23 they would understand why it was that three years or so
24 before the picture looked so very bright and three years
25 later some of the luster has worn off. This was the

1
2 support of it (indicating).

3 Actually, it all emanated from IRS. We could
4 have fought then but, again, compromise seemed to be the
5 thing that was in order.

6 This is why these papers were submitted in
7 advance and I do believe -- yes, it was approved by the
8 executive committee.

9 Q Even so, NL got considerably more out of the
10 property by donating it than it would by selling it?

11 A There was never any question about that. That
12 is what we are in business for, if we could get an advantage
13 to take it and attempt to to charitable work. These
14 people were real responsive to what they had gotten and
15 I think for the number of years they were there all records
16 I heard and read in the newspaper as very substantial,
17 good effects on their members.

18 Q You are talking about Synanon now?

19 A Yes, sir.

20 Q Let me show you, if I may, what has been
21 marked as Exhibit 14.

22 (Witness perusing document)

23 Q Is Exhibit 14 a minute of the executive
24 committee's action on May 29, 1974 that you sent to
25 Mr. McLean?

IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA
IN AND FOR THE CITY AND COUNTY OF SAN FRANCISCO

SYNANON CHURCH,

Plaintiff,

vs.

NO. 804-196

FOXCROFT ASSOCIATES, a
partnership; RANDALL F.
BAUKNEY; STEPHEN P. BEREZIN;
JOSEPH SKIFFER; and Does 1
through 10, inclusive
Defendants.

COPY

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FOXCROFT ASSOCIATES, a
partnership; RANDALL F.
BAUKNEY; STEPHEN P. BEREZIN;
JOSEPH SKIFFER, Jr., as individual
Cross-Complainants,

vs.

THE SYNANON CHURCH; NL
INDUSTRIES, INC., a
corporation; and Does I
through C, inclusive
Cross-Defendants.

-----//
STUART M. KAPLAN, Receiver
for 2222 Ltd., A California
limited partnership.
-----//

DEPOSITION OF SHARON GREEN

December 19, 1984

REPORTED BY: JAY W. HARBIDGE, CSR 4090

SAN FRANCISCO REPORTING SERVICE
625 THIRD STREET, THIRD FLOOR
SAN FRANCISCO, CALIFORNIA 94107
(415) 777-2111

EXHIBIT 11

1 with paint residues?

2 A. I recall most of these buildings as being
3 fairly dark, and for that reason I'm inclined to
4 say that I do not believe it was paint unless it
5 was black or dark brown or something like that.

6 There were paint splatters all around
7 every place, I mean, places where paint had been
8 dripped in a lot of different areas of the property,
9 but I don't have a specific recollection where they
10 were.

11 Q. As far as dust, dirt and other types of
12 debris are concerned, were the buildings in a
13 reasonably clean condition when Synanon took
14 possession of them?

15 A. For a manufacturing plant, it was
16 reasonably clean.

17 Q. Before the conveyance was effectuated,
18 did you have any discussions with anyone from NL
19 Industries as to the zoning status of the property?

20 A. I don't recall any specific discussions.
21 I do recall what the zoning status of the property
22 was and what our agreement with respect to this --
23 well, no, I'm going to rephrase that. What I do
24 recall is what our agreement was with respect to
25 the zoning. Beyond that, I have no recollection of
26 how I learned it or when.

1 Q. Is that the sum and substance of your
2 dealings with Foxcroft Associates?

3 A. Yes.

4 Q. To your knowledge, before Synanon
5 acquired the property, was there any discussion
6 between Synanon and NL Industries, Inc., as to any
7 possible residues in the soil from paint
8 manufacturing? I'm talking about lead, zinc,
9 chromium, metals of that sort.

10 A. Was there any discussion?

11 Q. Yes.

12 A. No.

13 Q. Was there any discussion between Synanon
14 and NL Industries, Inc., before the property was
15 acquired as to any possible residues of lead and
16 zinc and other metals from paint manufacturing in
17 the buildings, that is, the walls, floors,
18 foundations?

19 A. No.

20 Q. Did Synanon engage an engineer or any
21 technical consultants of that nature to review the
22 property or the building before it decided to
23 accept the donation?

24 A. I don't have any recollection that we did,
25 and we were so delighted about this donation that I
26 would be astonished that we had done such without.

1 my knowledge.

2 Q. Other than the zoning aspect that we
3 already discussed, are you aware of any discussion
4 between Synanon and NL Industries before the
5 property was transferred as to whether any aspect
6 of the former paint manufacturing use would limit
7 the future use of the property in any way?

8 A. Would you read that question back, please.

9 (Record read.)

10 THE WITNESS: No.

11 MR. HOFFMAN: Q. Did you at some point
12 become aware that the State of California raised an
13 issue as to contamination of this property by lead,
14 zinc and other metal residues in the soil?

15 A. No.

16 Q. Did you observe a chimney-type structure
17 on the property before Synanon acquired it?

18 A. There was a chimney there. Whether I saw
19 it before we acquired it or on the day we moved in,
20 I don't recall. I mean, it was very obvious. All
21 you had to do was go behind those buildings and you
22 could see it.

23 Q. Did you ever go inside the chimney?

24 A. No.

25 Q. Before Synanon acquired the property,
26 were there any discussions that you know of between

1 were in touch with could not or would not get such
2 insurance and therefore we did not use him. And
3 whether someone else later -- whether he later got
4 insurance or someone else later did or whether the
5 tanks are still there, I can't tell you. I just
6 don't remember what happened after that.

7 Q. Referring to the buried tanks under the
8 sidewalk, do you remember in what connection you
9 first learned about those tanks?

10 A. I really don't know. We had a lot of
11 people who were doing various things, preparing
12 this property for Synanon's uses. After we moved
13 in, more work was done. We had an architect who
14 was assisting. He also lived on the premises. He
15 did some remodeling of the particular area where he
16 lived, which is over here, number 20, the paint
17 house, and we were trying to get permission to put
18 the sign up. During all of this I was peripheral.
19 I was involved because any permits or applications
20 to the city had to have my approval before they
21 could be submitted.

22 We also had two or three other architects
23 who were Synanon residents who came to me from time
24 to time about various things that they wanted to do
25 or wanted to propose for this property, and because
26 they had to get -- they had to put the permit --

1 involve my office in the permit process, from time
2 to time I got information from various people. I
3 cannot really recall at all who told me about the
4 underground tanks or whether these are the specific
5 ones I was first told about. I knew that there
6 were some tanks underground in that property and I
7 knew that there were other tanks because I had seen
8 them. But beyond that, I can't distinguish at this
9 point in time.

10 Q. Did you ever learn whether or not there
11 was anything in these tanks under the sidewalk?

12 A. No, I can't tell whether I did or not.

13 Q. Were you ever on the board of directors
14 of Synanon?

15 A. No.

16 MR. HOFFMAN: Would you mark that as a
17 next in order, please.

18 (Whereupon, Intervenor's Exhibit A
19 was marked for identification.)

20 MR. HOFFMAN: Q. Now, is Exhibit A a
21 copy of a resolution that the Synanon board of
22 directors adopted on February 22, 1971?

23 A. Yes.

24 Q. Did you prepare the form of this
25 resolution?

26 A. The first two pages?

IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA
IN AND FOR THE CITY AND COUNTY OF SAN FRANCISCO

SYNANON CHURCH,

Plaintiff,

vs.

NO. 804-196

FOXCROFT ASSOCIATES, a
partnership; RANDALL F.
BAUKNEY; STEPHEN P. BEREZIN;
JOSEPH SKIFFER; and Does 1
through 10, inclusive
Defendants.

COPY

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FOXCROFT ASSOCIATES, a
partnership; RANDALL F.
BAUKNEY; STEPHEN P. BEREZIN;
JOSEPH SKIFFER, Jr., as individual
Cross-Complainants,
vs.

THE SYNANON CHURCH; NL
INDUSTRIES, INC., a
corporation; and Does 1
through C, inclusive
Cross-Defendants.

-----//
STUART M. KAPLAN, Receiver
for 2222 Ltd., A California
limited partnership.
-----//

DEPOSITION OF DAN L. GARRETT, JR.

December 19, 1984

REPORTED BY: JAY W. HARBIDGE, CSR 4090

SAN FRANCISCO REPORTING SERVICE
625 THIRD STREET, THIRD FLOOR
SAN FRANCISCO, CALIFORNIA 94107
(415) 777-2111

EXHIBIT 10

1 Q. Can you recall the general condition of
2 that part of the premises, buildings 805 and 806?
3 I'll be a little bit more specific in a minute, but
4 I just wanted to find out whether you have a
5 recollection now that the visit --

6 A. Well, I guess the answer to that would be
7 yes, I can recall the general condition.

8 Q. What was their general condition so far
9 as cleanliness or evidences that paint had been
10 manufactured at that location?

11 A. Well, the premises were pretty well
12 maintained. They seemed to be as clean as you
13 would expect an operating paint factory to be.
14 There were lots of evidences of paint and varnish
15 manufacture. The floors were spattered. There
16 were lots of places where, you know, paint was in
17 evidence, and the floors showed, you know, the
18 traces of heavy machinery working on them.

19 It seems to me like there was still a lot
20 of paint stored there when I -- early in my
21 observations, although when we got in, we cleaned
22 all that up. But I would say it was in pretty good
23 condition for a paint factory.

24 Q. Were the walls spattered with paint also?

25 A. Well, there were areas where paint was
26 spattered, walls, floors, you know, just in a

1 general way.

2 Q. Were there any solid residues, sludges or
3 anything of that nature, of either paint, varnish,
4 residual substances of that sort?

5 A. When you say "solid," do you mean dry?

6 Q. Caked, dry material, exactly, heavier
7 than what would amount to just a coating that had
8 dried.

9 A. Oh, I don't think I recall seeing
10 anything like that. It was just stuff that had
11 been spattered and dried.

12 Q. But you don't recall messes, any
13 significant messes of material of that nature?

14 A. You mean of a significant thickness?

15 Q. Yes.

16 A. No.

17 Q. Is that true of all the buildings that
18 you went through, that you didn't observe anything
19 of that character?

20 A. Well, in the laboratory where they
21 spattered with paints and I guess came up with new
22 combinations for paints or whatever it was they
23 conducted there, there was a lot of paint in
24 evidence that was spattered around. Over in the
25 areas where --

26 Q. Now, the laboratory of which you just

1 spoke, is that the laboratory that you referred to
2 earlier in building 801 or --

3 A. No, that was in 801.

4 Q. Which floor was that, if you recall?

5 A. It was either the third or fourth floor,
6 or second or third, maybe. I'm not quite sure.
7 Maybe it was the -- no, I think it was the third.
8 You know, it's been a long time ago.

9 Q. I understand.

10 A. Over where the manufacturing took place,
11 there was a lot more paint spattered around there.
12 You know, that's what you would expect.

13 Q. What about the buildings on the east side
14 of the property along the Rhode Island Street
15 property; were there any signs of varnish and use
16 of varnish and resins in those buildings?

17 A. Well, sure. You know, it was a paint
18 factory and there were areas in those buildings
19 that appeared to be related to the filling of paint
20 cans, the boxing of paints. There were big vats in
21 the area, for instance, that's marked 808, 810, 811.

22 Q. Do you recall the building with the
23 chimney that's designated 815 on this chart?

24 A. I think the building with the chimney was
25 either 813 or 814, wasn't it? Let's see. Well,
26 maybe not. Okay --

1 tanks of this nature, other than the fact that
2 there were some tanks under the ground?

3 A. I was aware that there were tanks under
4 the ground and above ground and vats and that sort
5 of thing.

6 Q. What about the vats and the equipment;
7 did you have any discussions with NL Industries as
8 to what would or would not be done with those items
9 before the donation was completed?

10 A. No.

11 Q. Do you know if Synanon arrived at any
12 agreement with NL Industries in that respect?

13 A. I don't know of any such agreement.

14 Q. Did you yourself ever have any
15 discussions with NL Industries about the
16 possibility that the soils on the property might be
17 contaminated in some way as a result of the
18 manufacturing operations that had been carried on
19 there?

20 A. No.

21 Q. To your knowledge, did anyone from
22 Synanon ever have any discussions of that subject
23 with anyone from NL Industries?

24 A. I don't know. None that I'm aware of.

25 Q. In any case, nothing was ever said by NL
26 to you about the possibility of any soil

1 contamination?

2 A. Not that I recall.

3 Q. Did you ever have any discussions with
4 anyone from NL Industries about the possibility
5 that any of the buildings, the floors or the walls,
6 concrete slabs, any portion of the buildings might
7 be contaminated as a result of the prior
8 manufacturing operations?

9 A. Well, there was nothing to discuss. It
10 was obvious on inspection that some sort of a paint
11 business had been conducted there, but if that's
12 what you mean by "contamination," I suppose the
13 contamination in that respect was obvious. But I
14 don't recall any discussions with anyone from NL
15 Industries about that fact.

16 Q. Were you yourself aware that paint and
17 varnish manufacturing involved use of heavy metals
18 such as lead, zinc, chromium, things of that nature?

19 A. Well, I obviously knew that it contained
20 lead, and I don't know what all the materials are
21 that go into paint, but lead is the obvious one.

22 Q. Well, was the subject of lead as a
23 possible contaminant of the property discussed in
24 any way in your knowledge with NL Industries before
25 the donation was completed?

26 MR. WEILL: I'm unclear as to -- I

1 believe that you and I may have an understanding of
2 the word contaminant, but I'm not sure from the
3 witness' earlier answer whether he does. If it's
4 being used as a synonym for being spattered as
5 paint residue, then that's different than maybe
6 what you are talking about by that question. I
7 think you both should arrive at an understanding.

8 MR. HOFFMAN: Q. I'm happy to refer to
9 residues of lead. Was there ever any discussion as
10 to lead being --

11 A. Lead poisoning, that sort of thing?

12 Q. -- well, lead being a residue on the
13 property, either in the soils or in the buildings,
14 as a result of the prior manufacturing operations?

15 A. Not that I know of.

16 Q. Would your answer be the same if I asked
17 you about any other metal such as zinc, chromium,
18 cadmium, copper, things of that nature?

19 A. Yes, I suppose it would. It would be
20 obvious that there was a paint laboratory being
21 conducted there with all kinds of materials being
22 used and I suppose analyzed and spattered with, but
23 I don't recall any discussions about this producing
24 contamination by lead of either the soil or the
25 buildings.

26 Q. Do you know what the term PCB's refers to?

1 being sought, and I was told that lead
2 contamination was an issue, and that's the first
3 time I had ever heard of that being an issue.

4 Q. Was it Mr. Weill who informed you of that?

5 A. No, I think it was Phil Bourdette.

6 Q. After Synanon acquired the property from
7 NL Industries, were there various things that had
8 to be removed from the property in order to make it
9 usable for Synanon's purposes?

10 A. Well, when you say "had to be removed," I
11 guess the answer to that would be no, because we
12 utilized it immediately and there were a number of
13 ongoing operations to remove and dispose of scrap
14 metal, piping, tanks, whatever it was, and I think
15 that went on more or less during the time when we
16 owned the property.

17 MR. HOFFMAN: Would you mark that as
18 Exhibit 4, please.

19 (Whereupon, Intervenor's Exhibit 4
20 was marked for identification.)

21 MR. HOFFMAN: Q. Mr. Garrett, I've
22 handed you Exhibit 4, which is a five-page document,
23 the first page of which is headed "Corporation
24 Grant Deed" which contains additional material.
25 Could you look at the last page of this document
26 where there's a signature block for Synanon

1 Foundation, Inc.

2 Is that a copy of your signature that
3 appears above that line?

4 A. Yes.

5 MR. WEILL: For the record, that page
6 bears our document stamp number of GNS000236?

7 MR. HOFFMAN: That refers to a document
8 that NL Industries produced; is that correct, Mr.
9 Weill?

10 MR. WEILL: I think so, if I remember my
11 initials. GSY is our documents and GNS is theirs.

12 MR. HOFFMAN: Q. Do you remember signing
13 this document, Mr. Garrett?

14 MR. WEILL: Well, I'm going to object
15 just simply because in reviewing this, I don't
16 necessarily agree to the characterization of this
17 as one document. But otherwise, I have no
18 objection. But it appears that there's a page 1
19 and then there's two unmarked pages and then
20 there's a page 2, which is a fourth page, so I'm
21 not sure that this is one document.

22 THE WITNESS: Well, I would have to say
23 that I don't really remember signing the document.
24 I remember being more or less in charge of the
25 negotiations and the completion of the donation,
26 but that's my signature. As I sit here, I don't

1 remember sitting down and signing it, although I do
2 recall looking at it and that I used the name Dan
3 Garrett, vice president, rather than Dan L. Garrett,
4 Jr., and I did that for a while.

5 MR. HOFFMAN: Q. Did you draft any
6 documents, to your recollection, in connection with
7 this transaction?

8 A. I don't believe I did.

9 Q. Referring to the documents in front of
10 you, Exhibit 4, whether they be one or more than
11 one, do you know who drafted those documents?

12 A. I don't know.

13 Q. Did anyone from Synanon draft any
14 documents in connection with the transaction, any
15 attorneys, to your knowledge?

16 A. I don't know.

17 Q. Do you know whether Synanon ever
18 excavated or graded any portion of the property
19 after acquiring it from National Lead?

20 A. I don't know.

21 Q. Do you remember what part, if any, of the
22 property consisted of soils that were not covered
23 by concrete or pavement or buildings of some nature
24 at the time the property was acquired?

25 A. I just -- I don't recall one way or the
26 other. My impression at this point is that there

1 A. I don't recall anything like that.

2 Q. Was there anything at all unusual about
3 the appearance of the surface of the soil in any
4 respect?

5 A. No.

6 Q. Never heard anything about that from
7 anyone else at Synanon?

8 A. No. The first time I heard anything
9 about contamination of the soil was when Phil
10 Bourdette told me that this lawsuit was in progress
11 and that you were, I guess it was, seeking my
12 deposition.

13 MR. HOFFMAN: Would you mark that as
14 Exhibit 5, please.

15 (Whereupon, Intervenor's Exhibit 5
16 was marked for identification.)

17 MR. HOFFMAN: Q. Mr. Garrett, I've
18 handed you several pages of a document, which is
19 really a portion of a larger document that's been
20 marked as -- or the pages have been marked as
21 Exhibit 5 for your deposition. Let me represent to
22 you, and I think Mr. Weill will confirm, that these
23 are copies of pages 168 through 176 of an
24 environmental impact report on this property that
25 was prepared after Synanon conveyed the property to
26 2222 Limited.

1 What it is, is a list and description of
2 what are called "Chemicals Found On The Project
3 Site." The list was prepared by the consultants who
4 prepared the environmental impact report. I don't
5 want to take your time to ask you to go through
6 these items individually. What I want to ask you
7 is if you might review the list generally for just
8 a moment and then I'll ask you a few questions, a
9 few general questions about it.

10 MR. WEILL: This is from the final EIR?

11 MR. HOFFMAN: Final as far as I know, yes.

12 THE WITNESS: Okay.

13 MR. HOFFMAN: Q. First of all, do you
14 know whether -- you see that in several cases there
15 are references here to drums of materials of
16 various sorts?

17 A. Okay, 55-gallon, 50-gallon. .

18 Q. 50-gallon drums and so forth and so on.
19 Do you know whether there was any material stored
20 in drums that was left on the property at the time
21 Synanon acquired it and remained there, you know,
22 through the entire period of Synanon's ownership
23 until the time that it was conveyed away?

24 A. Read that back again, I'm sorry.

25 (Record read.)

26 THE WITNESS: Well, I don't know what the

1 circumstances were when Synanon conveyed the
2 property away. You tell me that took place sometime
3 in 1980?

4 MR. HOFFMAN: Q. Correct.

5 A. I left there February 12th, 1980, so that
6 was my last connection with Synanon. I don't
7 believe I've set foot on Synanon property, except
8 to pick up my stepdaughter on one or two occasions
9 in Tomales Bay, and I went to the San Francisco
10 warehouse, which was at Oyster Point, to pick up
11 some of my household items and other belongings at
12 one point. That was shortly after I left. So
13 other than that, I would have no knowledge of what
14 went on at the San Francisco paint factory facility.

15 In answer to your question about were
16 there things like this on the property, there were
17 lots of things like this on the property, although
18 I couldn't tell you what was in, you know, each
19 container or tell you all of the variety of
20 chemicals or whatever that were in these drums.

21 Q. I understand that.

22 A. But I do know that when we took over the
23 property, there was lots of this -- you know, there
24 were these things there, and it looks like they
25 remained there up until the end, if this study was
26 done after your folks took over the property.

1 Q. Yes. This study was done later in 1980
2 after the property was conveyed by Synanon to 2222
3 Limited.

4 A. Well, these look like the materials that
5 were left on the property from the paint factory
6 operation. I can't imagine what we would be doing
7 with these things, unless it's something like the
8 Black Flag home size spray or bathroom cleaning
9 products or cleaning products in the wooden box,
10 things of that nature. The other things I don't
11 believe would have anything to do with our
12 operation. I'm saying that in general terms
13 without looking through the whole thing and
14 examining each item. I guess that's understood,
15 okay?

16 Q. Yes, it is understood.

17 A. All right.

18 Q. Other than those small or miscellaneous
19 items, there are no items that you recognize as
20 being ones that Synanon used during the time it was
21 on the property?

22 A. Well, it's hard to answer that. In
23 general terms, I can give you some examples. Like
24 hydroacetic acid, I don't know what we would be
25 doing with anything like that. Two five-gallon
26 containers of soft brown solid, we might have that

1 for cooking purposes. Then the one home size can
2 of Black Flag pesticide, I assume we probably used
3 pesticides from time to time because, like any
4 other living operation, you have to get rid of bugs
5 and that sort of thing. Bathroom cleaning products,
6 we certainly would have had those. The paint
7 materials look like some of those we could have
8 used because we did a lot of painting and, in fact,
9 painted the entire exterior of the building and I
10 believe sealed it at one point because of leaks
11 that developed in the driving winter rain.

12 So these paint materials and that sort of
13 thing may well have been materials that we used
14 from time to time. We did a lot of renovation
15 inside the buildings, and of course we painted
16 extensively to redecorate and refurbish and so on,
17 so --

18 Q. Was there also sealing of floors, walls,
19 things of that nature inside?

20 A. Well, we put in floors. Generally, when
21 we put in a floor covering, we put in some sort of
22 a -- I think it was called Quiet Zone stuff, so I
23 just don't know enough about these terms to know,
24 but it looks to me like this list of materials may
25 be a combination of stuff that was left there and
26 material that we had for purposes of reconstruction

1 of painting and sealing and so on.

2 MR. WEILL: Before going further, I just
3 noticed something -- so the record is not confused --
4 on page 176.

5 MR. HOFFMAN: Why don't we take off page
6 176. It really wasn't intended to be part of the
7 examination. It's part of the same documents, but
8 it wasn't part of the materials that I intended to
9 ask Mr. Garrett about.

10 (Discussion off the record.)

11 MR. WEILL: It's been stipulated between
12 Mr. Hoffman and myself on behalf of the parties
13 present here that in Mr. Garrett's testimony
14 referring to Intervenor's Exhibit 5, that he was
15 referring to the materials listed on pages 168
16 through 175, that he was not referring to any of
17 the materials listed on page 176 and that we have
18 also stipulated that page 176 is to be removed from
19 Intervenor's Exhibit 5.

20 MR. HOFFMAN: That's correct

21 (Brief recess.)

22 MR. HOFFMAN: Q. Mr. Garrett, did you
23 ever meet a man named Richard Marklin, M-a-r-k-l-i-n,
24 connected with NL Industries?

25 A. I don't know. The name doesn't ring a
26 bell, although that doesn't mean I didn't meet him.



DEPARTMENT OF CITY PLANNING 100 LARKIN STREET - SAN FRANCISCO, CALIFORNIA 94102

DRAFT
ENVIRONMENTAL IMPACT REPORT
EE 80.110

2222 23RD STREET

PUBLICATION DATE: MARCH 27, 1981

PUBLIC COMMENT PERIOD: MARCH 30, 1981

THROUGH MAY 14, 1981

PUBLIC HEARING DATE: APRIL 30, 1981

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45 Hyde Street
San Francisco, California 94102

TABLE OF CONTENTS

	<u>Page</u>
List of Exhibits	iv
List of Tables	v
I. SUMMARY	1
II. PROJECT DESCRIPTION	4
A. Sponsor and Objectives	4
B. Location	4
C. Description	4
D. Required Project Approvals	16
III. ENVIRONMENTAL SETTING	18
A. Land Use and Zoning	18
B. History of the Site	25
C. Transportation	28
D. Noise	33
E. Topography and Geology	37
F. Plants	38
IV. ENVIRONMENTAL IMPACT OF THE PROPOSED PROJECT	39
A. Land Use and Zoning	39
B. Historic Structures	40
C. Comprehensive Plan and Other City Policies	40
D. Socioeconomics	43
E. Transportation	47
F. Noise	51
G. Air Quality	54
H. Toxic Substances	60
I. Energy	71
J. Community Services	77
K. Topography and Earthquake Effects	81

TABLE OF CONTENTS (Cont'd)

	<u>Page</u>
IV. ENVIRONMENTAL IMPACT OF THE PROPOSED PROJECT (Cont'd)	
L. Plants	82
M. Short Term Use of Man's Environment vs. the Maintenance of Long Term Productivity	82
N. Growth Inducing Effects	82
O. Neighborhood Concerns	84
V. MITIGATION MEASURES	86
A. Urban Design	86
B. Historic Structures	86
C. Housing Cost	87
D. Noise	87
E. Toxic Substances	88
F. Energy	93
G. Structural Safety	95
VI. ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED IF PROPOSAL IS IMPLEMENTED	98
A. Land Use	98
B. Noise	98
C. Energy	98
D. Air Quality	98
F. Toxic Substances	98
VII. ALTERANTIVES	99
A. Low Density Alternative	99
B. High Density Alternative	102
C. Mixed Housing Alternative	104
D. No Project	108

TABLE OF CONTENTS (Cont'd)

	<u>Page</u>
VIII. EIR AUTHORS AND CONSULTANTS: ORGANIZATIONS AND PERSONS CONTACTED	109
IX. DISTRIBUTION LIST	113
<u>Appendices</u>	117
A. Proposed Project Costs	119
B. Traffic	121
C. Chemical Data	128

LIST OF EXHIBITS AND TABLES

<u>Exhibits</u>	<u>Page</u>
1. Regional Location	2
2. Site Location	5
3. Existing Site	6
4. Rhode Island St. and Kansas St. Elevations	8
5. 23rd St. Elevation	9
6. 24th St. Elevation	10
7. Kansas Street Grade Plan	11
8. First Floor Plan	12
9. Second Floor Plan	13
10. Third Floor Plan	14
11. Fourth Floor Plan	15
12. Zoning	19
13. Photograph of Site and Freeway and Photo- graph from Site of Kansas St. and 23rd St.	20
14. Existing Land Use	21
15. Photograph of Buildings Facing Site on Rhode Island St. and Photograph of Buildings Facing Site on 23rd St.	22
16. Wisconsin Street Site	23
17. Photograph of Chimney and Garage to be Retained	26
18. Street Map Showing Connections To and From James Lick Freeway	29
19. Transit Service	31
20. Noise Measurement Locations	34
21. Relationship of Zinc and Lead Concentrations to Depth in Soil	66
22. Low Density Alternative	100
23. High Density Alternative	103

LIST OF EXHIBITS AND TABLES (Cont'd)

	<u>Page</u>
<u>Tables</u>	
1. Unit Types and Prices	16
2. Street Characteristics	28
3. Ambient Noise Measurements	35
4. Allowable Housing Density by Zoning Districts	40
5. Estimated Municipal Tax Revenues in 1980 Dollars, Calculated at 1980-1981 Tax Rates	44
6. Comparative Sale and Resale Prices of Potrero Hill Housing	45
7. Average Weekday Vehicular Trip Generation	47
8. San Francisco Quarterly Air Lead Concentrations in Milligrams Per Cubic Meter, MG/M ³	56
9. Energy Intensiveness of Typical Building Materials	71
10. Crime Incidence in Project Area	78
11. San Francisco Heat Loss Through Single- and Double-Glazed Windows	93
12. Maximum HUD, Section 8, Fair Market Rents	104
13. Alternative C, Maximum Possible Sales Income	106
14. Maximum Possible Section 8 Income Per Year	106

I. SUMMARY

A Planned Unit Development (PUD), consisting of 132 condominiums, 8500 square feet of neighborhood commercial space, and 161 parking spaces, is proposed for the former paint manufacturing site including the entire block bordered by Kansas, 23rd, Rhode Island and 24th Sts. The project would include rezoning from RH-2 (House, Two-Family) to RM-2 (Mixed Residential, Moderate Density), to be requested by project sponsor. A building at Kansas and 24th Sts. would be remodeled into housing units, and a chimney on Rhode Island, listed in the Department of City Planning Architectural Survey, would be preserved. The site is on the east edge of the James Lick Freeway and is subject to Freeway noise.

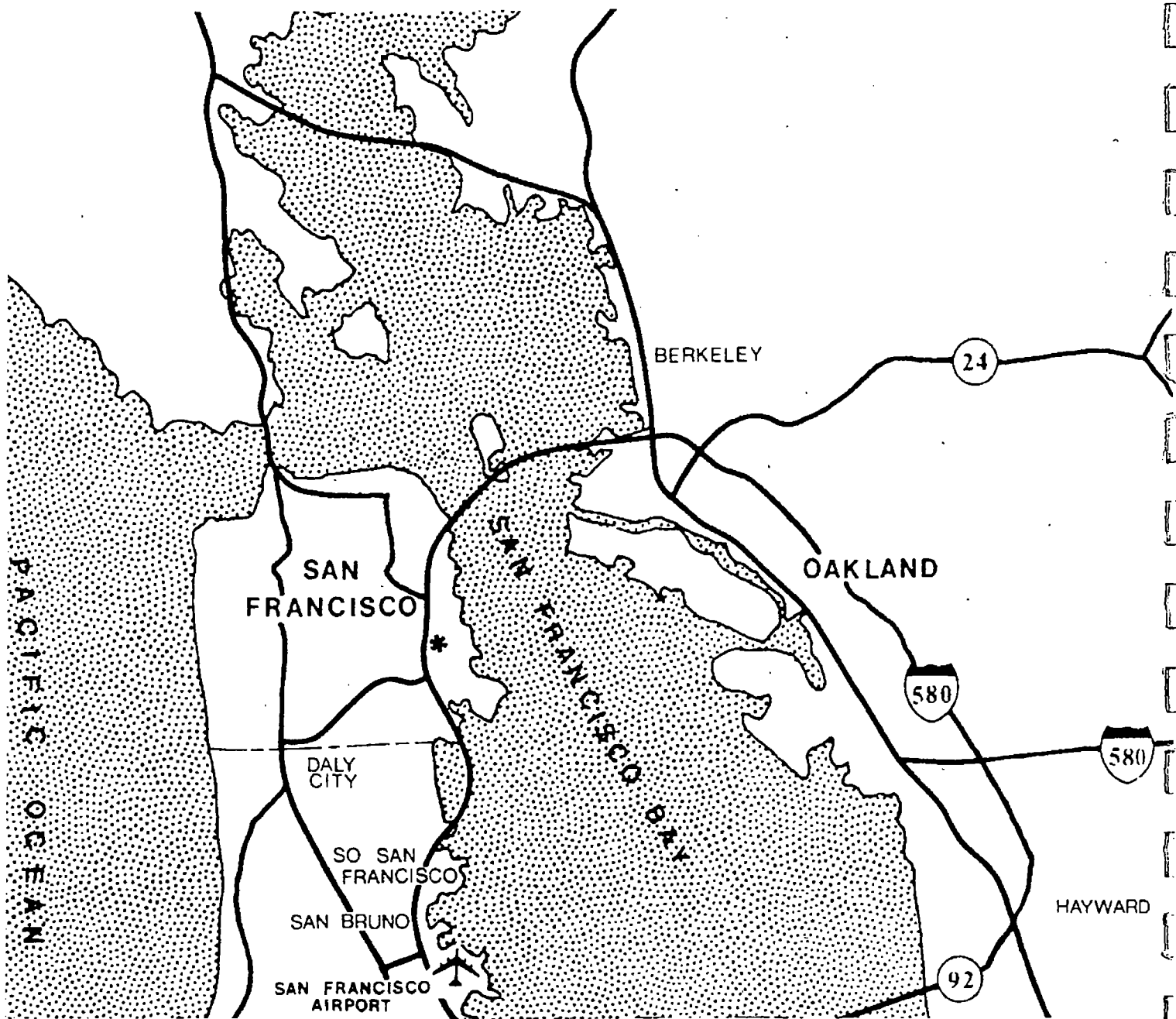
The project design would generally maintain the present site development configuration with a perimeter of structures surrounding central, common open space. New construction would comply with the 40 ft. height limit.

The project would comply with Master Plan policies encouraging the use of underused land and development of a variety of housing unit types by provision of 13 studios, 29 one-bedroom, 81 two-bedroom and 9 three-bedroom units on an unused site.

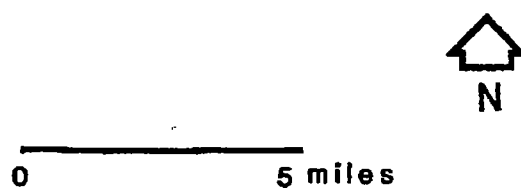
The project would generate about 740 vehicle trips per day. The four bounding streets would remain at Level of Service A with this additional traffic; and freedom of pedestrian movement would not be affected. Off-street parking within the project and now unused street parking space would accommodate project-generated parking needs.

The relatively high noise levels on the west side of the project would be mitigated by use of sound attenuating construction materials to bring interior noise levels to a non intrusive level.

Toxic materials in containers on the site have been removed. Demolition and renovation will be conducted so as to prevent dispersion of toxic dust in the neighborhood. The incinerator will be sealed to prevent access to toxic materials inside. Heavy metal paint ingredients spilled on the site presently contaminate the soil. After removal of the concrete slabs which cover most of



Regional Location



* Project

Exhibit No. 1

the site, a soil analysis program and appropriate mitigation measures will be developed in consultation with the Hazardous Materials Section of the State Department of Health Services. Electrical equipment containing PCBs and PCB spills will be removed prior to demolition.

Some neighborhood groups have expressed concerns over the potential effect of the proposed project on housing price inflation in the Potrero Hill area.

Four alternatives to the proposed project have been considered, including the No Project Alternative. A Low Density Alternative, complying with present RH-2 zoning, could include 53 units which would be more expensive than the project because of the small number of units and absence of remodeled units. A High Density Alternative, requiring reclassification to RM-3 rather than RM-2, could include 200 units. This Alternative would be out of scale with surrounding development. A Mixed Housing Alternative, evenly divided between market rate, moderate income condominiums and Section 8 subsidized low income rental units, was also considered and found to not be economically feasible.

II. PROJECT DESCRIPTION

A. Sponsor and Objectives

The project sponsor is "2222 23rd Street," a San Francisco partnership, and the project architect is Architects Associated.¹ The objectives of the sponsor are to provide housing, to provide a return on the investors' money, and to produce a project sensitive to the site-specific issues discussed in the DEIR.

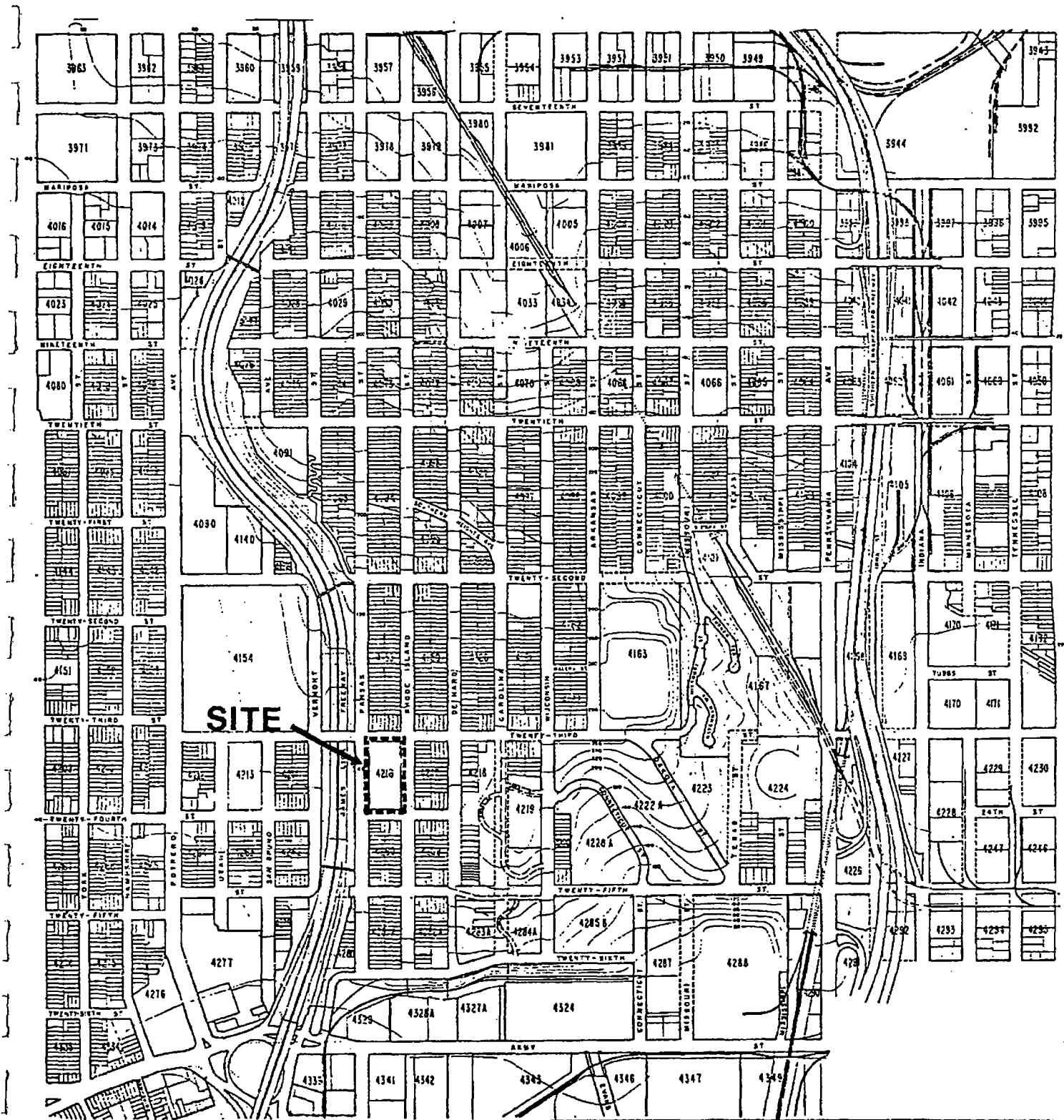
B. Location

The project site is an 80,000 square foot, 1-block area at the western base of Potrero Hill in southeastern San Francisco (see Exhibit 2, page 5). The site includes the entire Assessor's Block 4216, Lot 1, bounded on the east by Kansas Street, on the west by Rhode Island Street, on the south by 24th Street, and on the north by 23rd Street (see Exhibit 3, page 6).

C. Description

The project would consist of 132 condominiums, 8,500 square feet of neighborhood commercial establishments and 161 parking spaces. Ninety-five new condominiums would occupy 104,700 square feet on four levels (34,400 sq.ft. of site), and 34,980 square feet in the existing buildings (warehouse and garage) would be rehabilitated into 37 condominiums. The development costs of the project, including demolition, are estimated at \$14,700,000 as of March, 1981. Construction costs would be about \$10.2 million of the total (see Appendix A, page 120).

The project is in an RH-2 (House, Two-Family) district, containing predominantly two-family dwellings. Project sponsor would request a zoning reclassification to RM-2 (Mixed Residential, Moderate Density). The proposed project is within a 40 X Height and Bulk District, which limits development to a height of 40 feet and sets no bulk limits.



Site Location



0 600'

Exhibit No. 2

Kansas St.

23rd St.

Courtyard

Rhode Island St.

Existing Site

— Sidewalk

— Building Line

T - Transit Stop with exclusive loading area

— Existing Walls to be Retained



Existing Structures to be Retained

0 40'



Exhibit No. 3

24th St.

6

The proposed project would consist of 4 stories of construction and parking and commercial development at the Kansas Street grade, below a first floor common to the entire project. The interior of the existing building at Kansas and 24th Streets would be remodeled. The penthouse on this building would be removed. The 24th Street elevation of the project (Exhibit 6, page 10) shows the gradient along that side of the proposed project. Due to the site slope, there would actually be 3 different "first floors": on Kansas Street (the lowest); on 24th Street; and on Rhode Island Street (the highest). These differences in elevation, plus the nature of the surrounding development fronting each street, have resulted in different architectural treatments of the elevations.

The Kansas Street side of the project would face the James Lick Freeway. This side of the project has been designed to minimize residents' exposure to the noise and air pollutants from the Freeway (Exhibit 13, page 20 shows proximity of project to Freeway). The Rhode Island Street side of the project (Exhibit 4, page 8) would front on a 2- to 3-story residential block. On 23rd Street (Exhibit 5, page 9) the project would face a ground floor grocery store with residential units and 3- to 4-story residential structures. On 24th Street (Exhibit 6, page 10) the project would face 2-story residential structures. Plans for each of the floors of the proposed development are shown in Exhibits 7-11, pages 11-15. Existing buildings to be retained are indicated on the elevations.

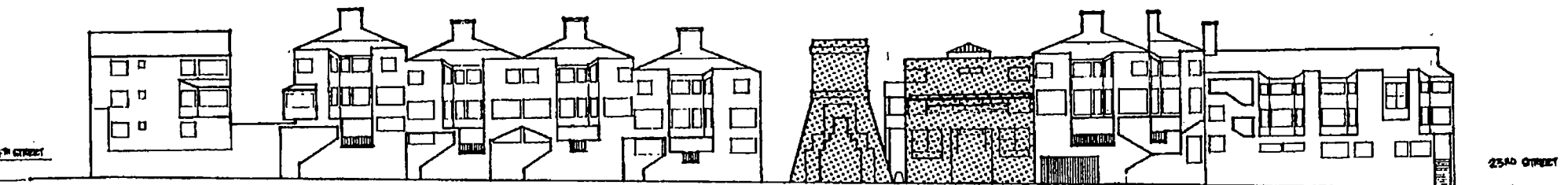
The building would be around the perimeter of the site, surrounding common open space which may include a swimming pool.

There are no landmarks, either designated or nominated, on the site.

Units would be in the mix of sizes and prices shown in Table 1, page 16.



Kansas Street



Rhode Island Street

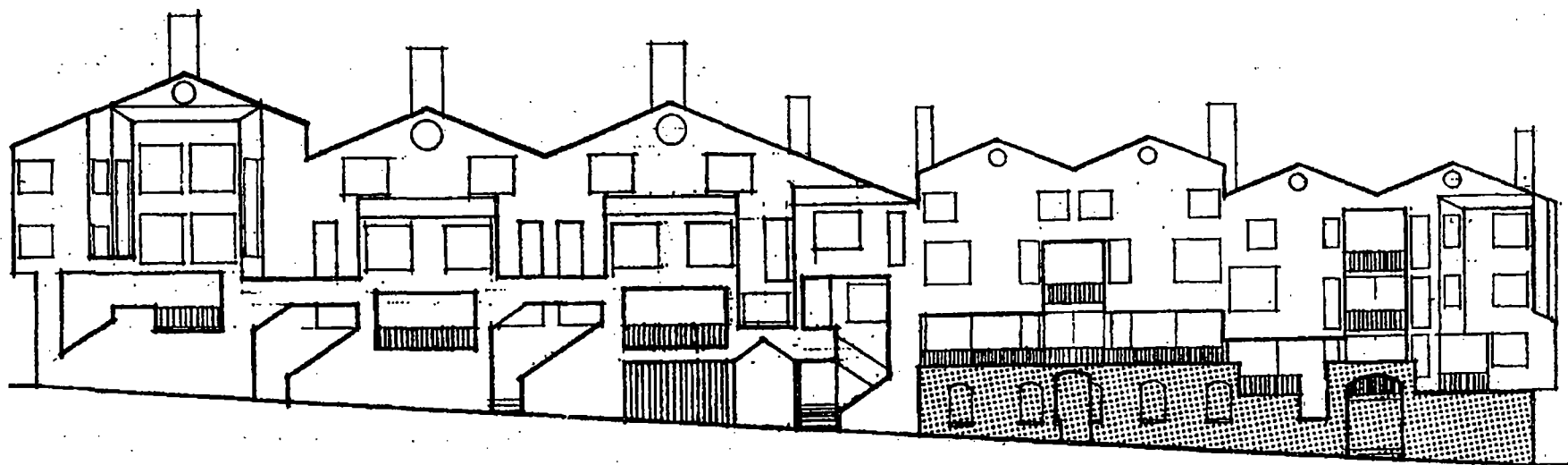
Elevations



existing areas to be retained

0 40'

Exhibit No. 4



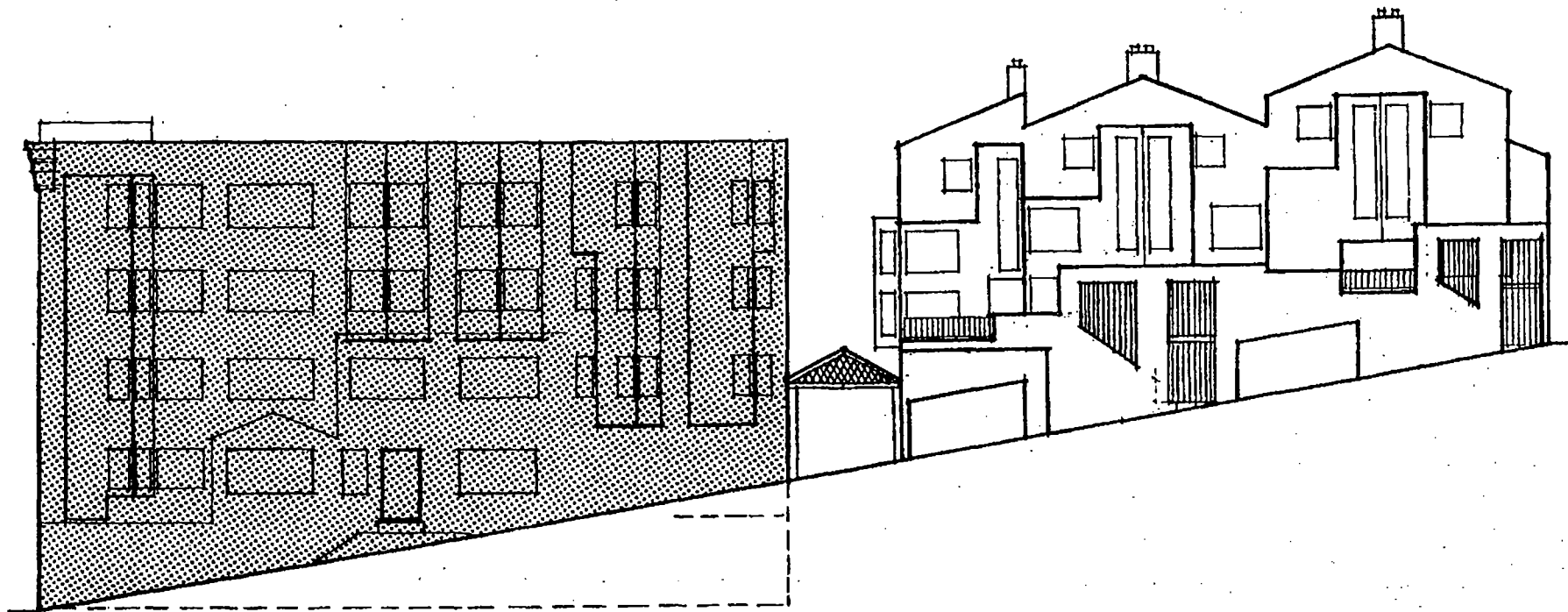
23rd St. Elevation



existing areas to be retained

0 ————— 20'

Exhibit No. 5



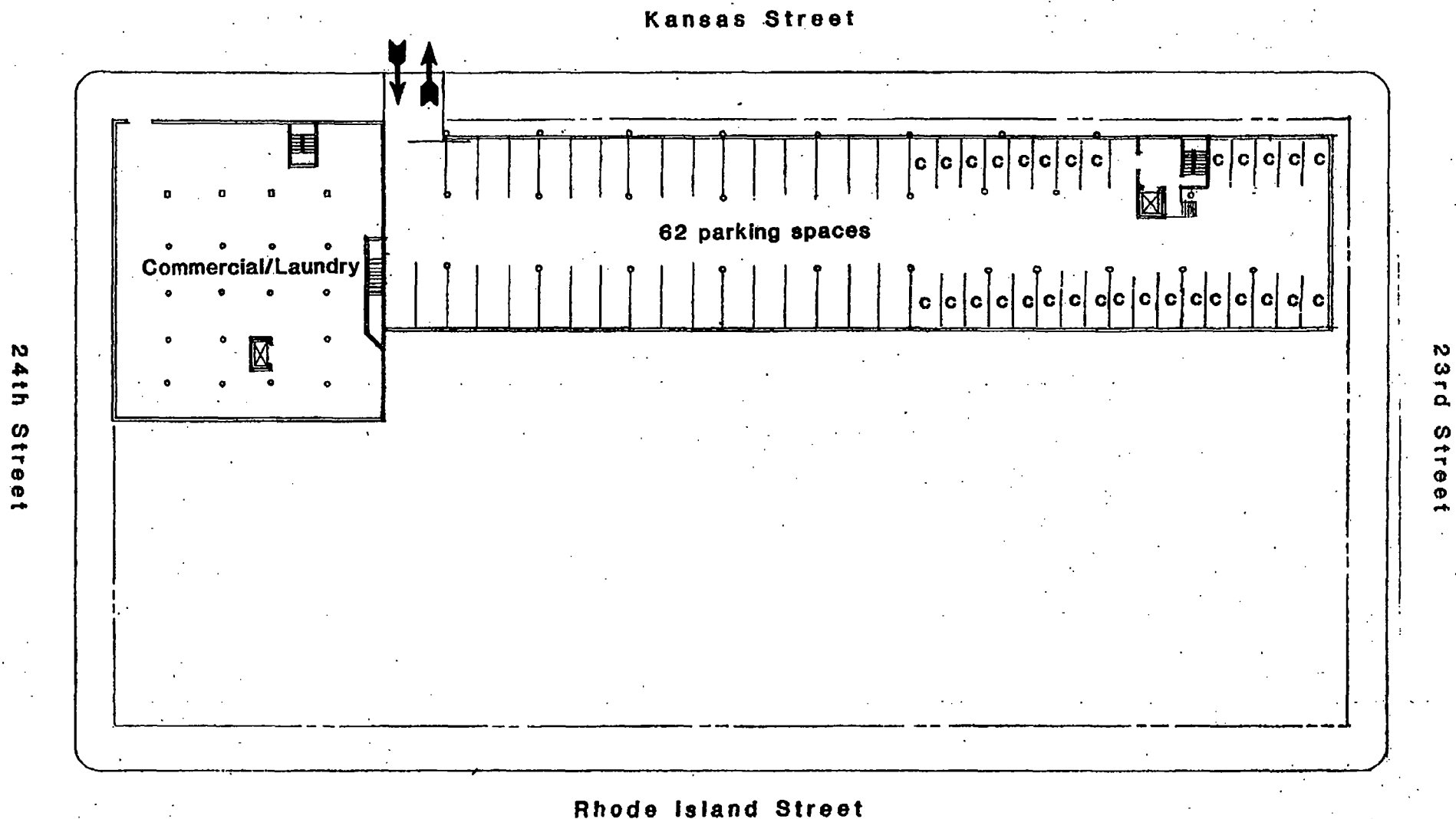
24th St. Elevation



existing areas to be retained

0 20'

Exhibit No. 6



Kansas Street Grade Plan

→ auto entry

C - compact auto

0 45'

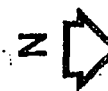
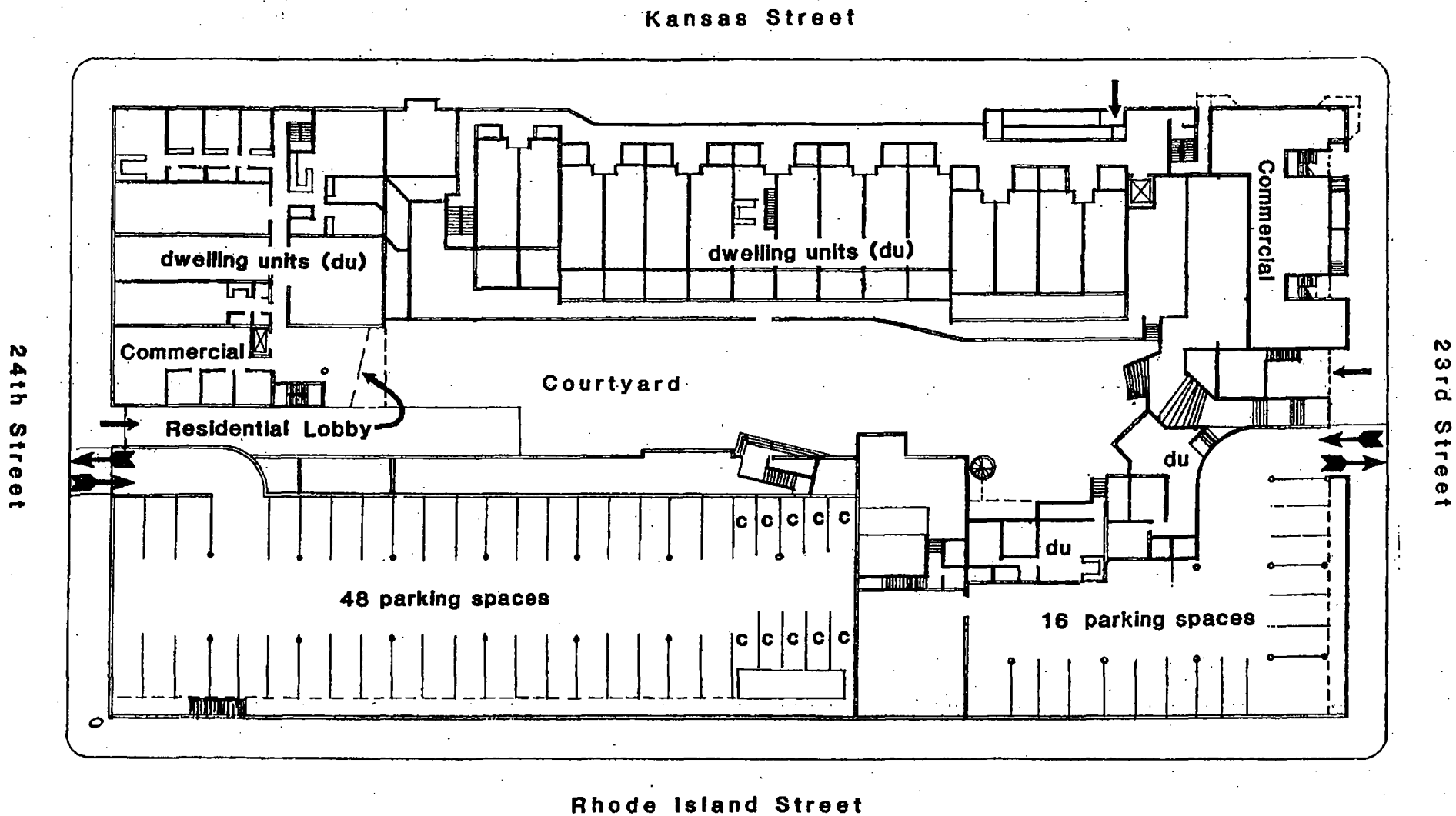


Exhibit No. 7



First Floor Plan

➡ auto entry

→ pedestrian entry

c - compact auto

0 45'

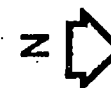
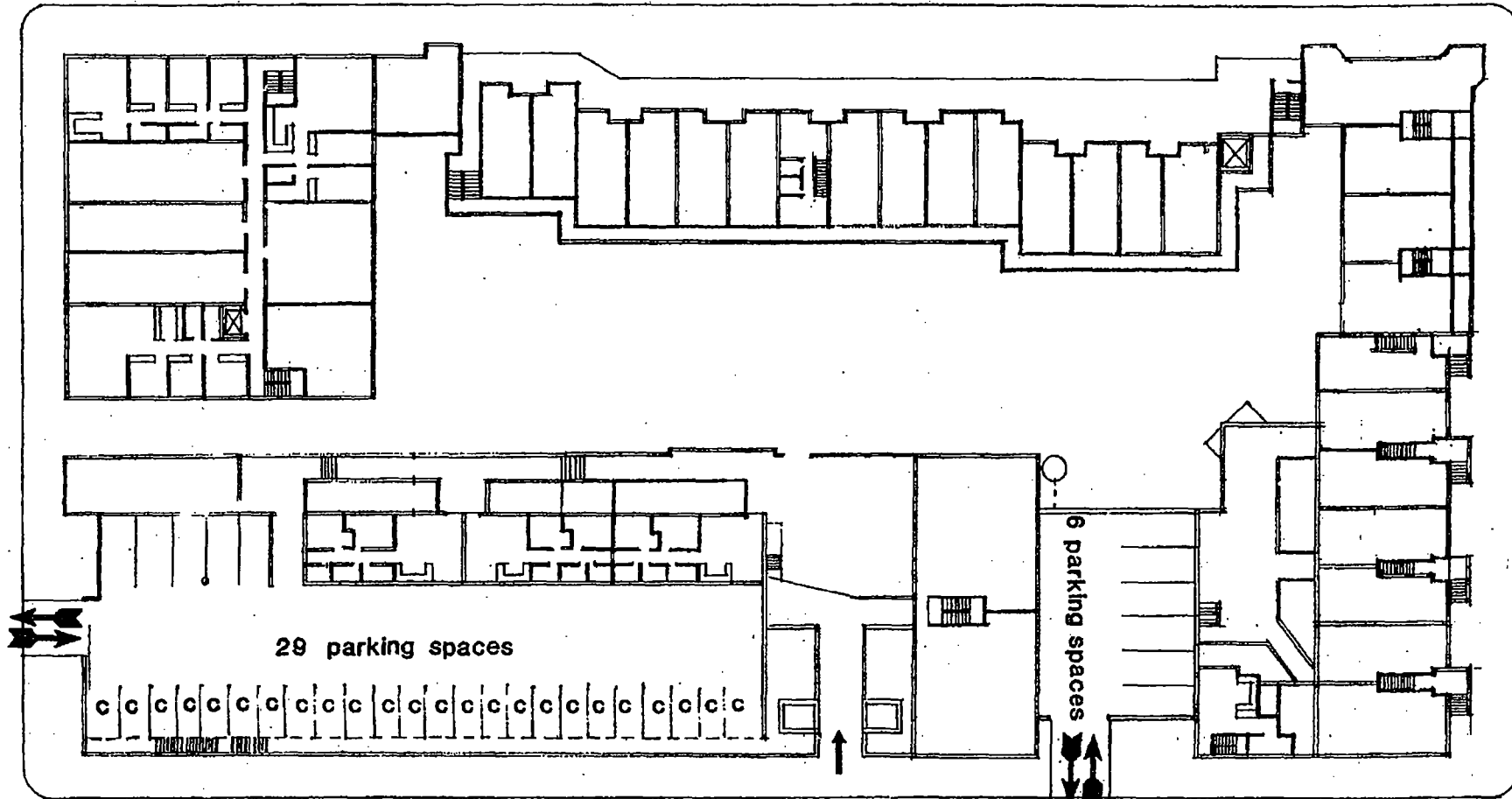


Exhibit No. 8

Kansas Street

24th Street

23rd Street



Rhode Island Street

Second Floor Plan

➡ auto entry

→ pedestrian entry

c - compact auto

0 45'



Exhibit No. 9

Kansas Street

24th Street

23rd Street

Rhode Island Street

Third Floor Plan

0 45'

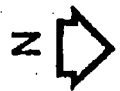
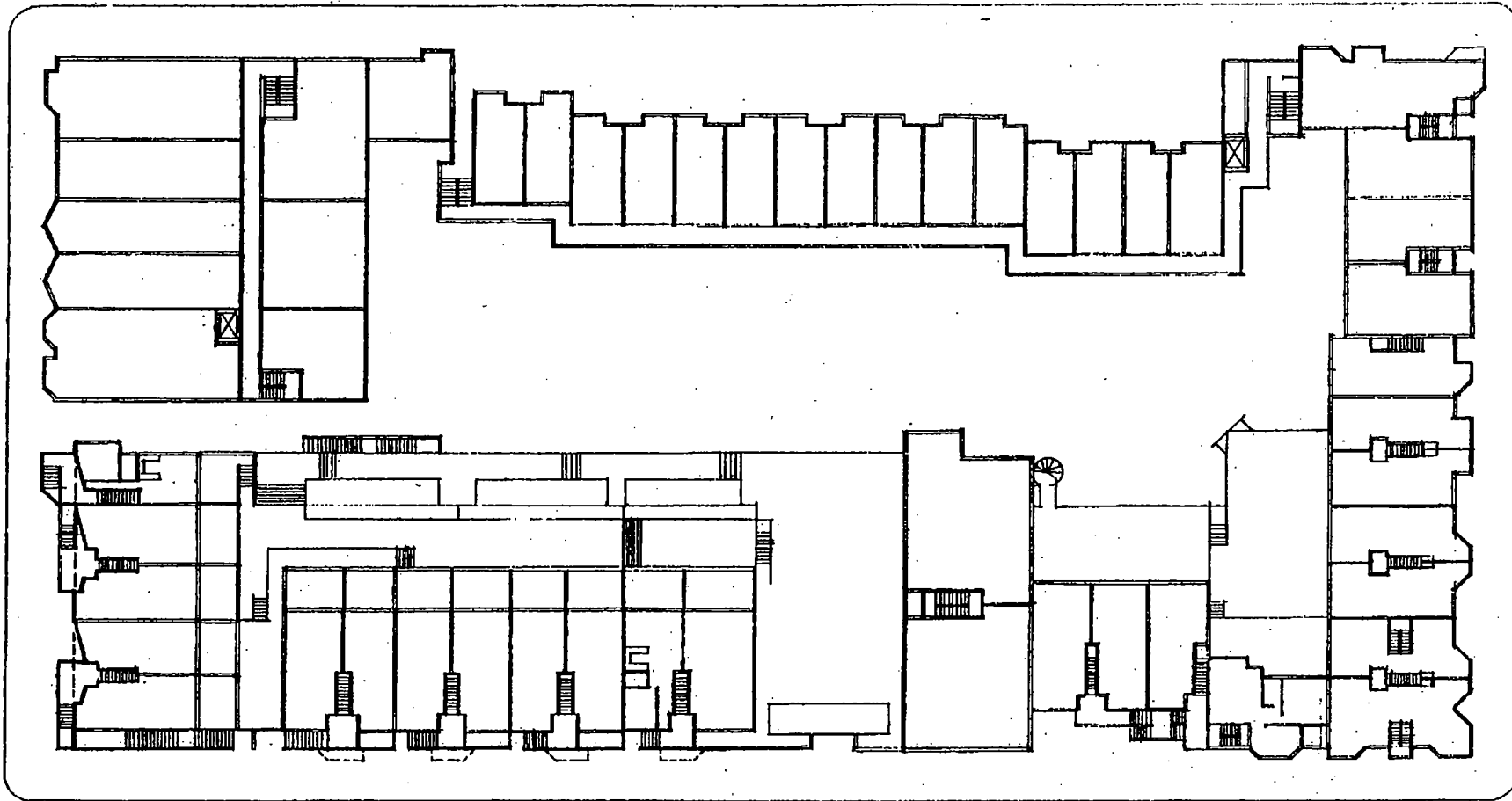


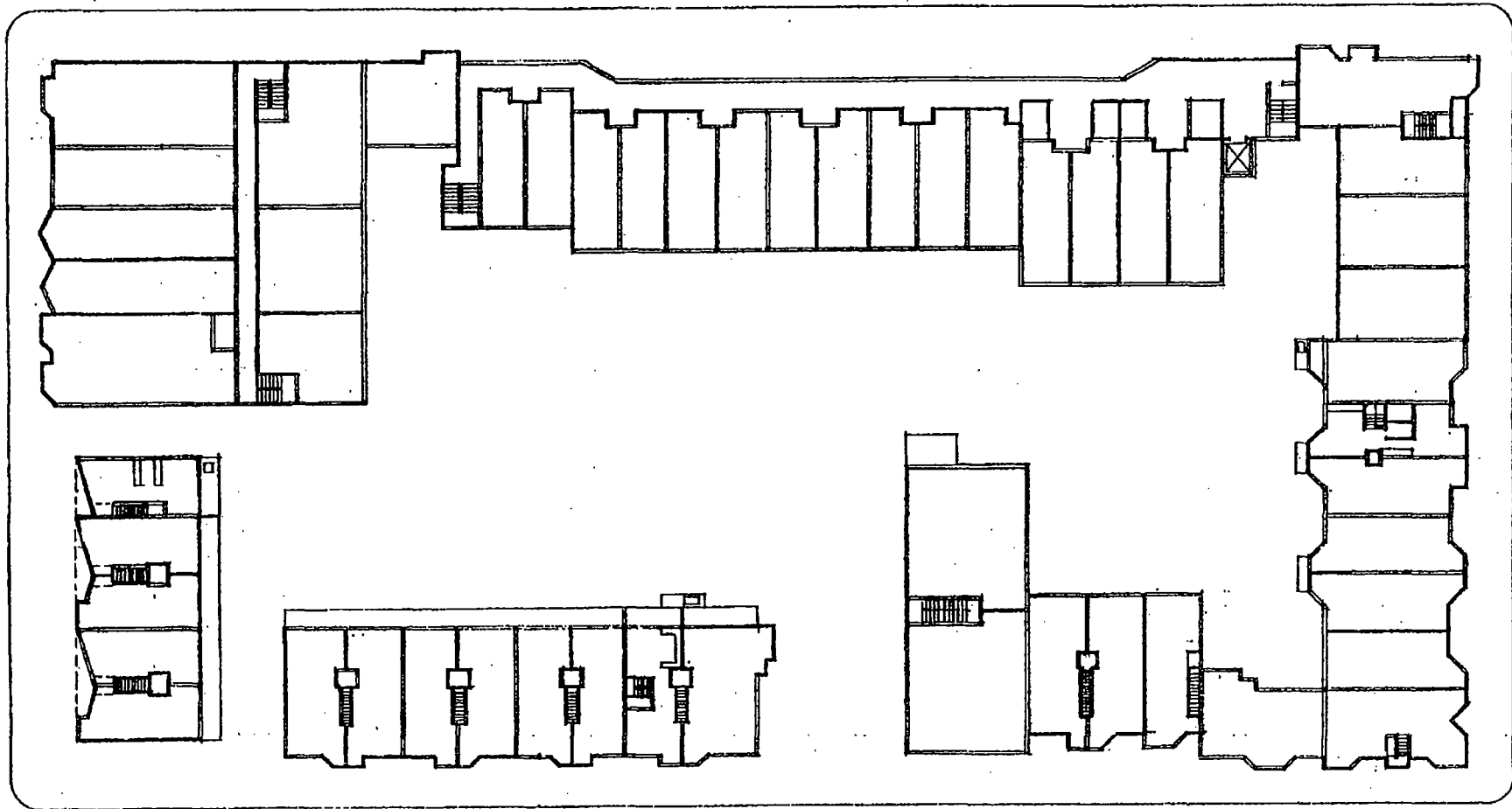
Exhibit No. 10



Kansas Street

24th Street

15



Rhode Island Street

Fourth Floor Plan

0 45'

z |

Exhibit No. 11

TABLE 1. UNIT TYPES AND PRICES

<u>Unit Types</u>	<u>No.</u>	<u>Expected Prices</u> <u>(March 1981 Dollars)</u>
Studios	13	\$ 99,000 - \$113,000*
One-Bedroom	29	\$ 71,000 - \$ 93,000
Two-Bedroom	81	\$ 99,000 - \$167,000
Three-Bedroom	9	\$172,000 - \$209,000
Total Units	132	

*Prices of studio units would exceed prices of 1-bedroom units because the studio units would be larger.

The proposed project would take 21 months to complete, from the time building permits are issued. Demolition would take approximately 3 months. New construction and initiation of rehabilitation would take approximately 15 months. Completion of rehabilitation and remodeling would take approximately 3 months.

D. Required Project Approvals

Certification of the Final Environmental Impact Report by the City Planning Commission is required before any other approval actions may take place. The main project approval action would be zoning reclassification and the Conditional Use Authorization.

Zoning reclassification from RH-2 (Residential Two-Family District) to RM-2 (Residential, Mixed District, Two-Family) would be required for the housing density proposed. Approval of a zoning change requires a public hearing and approval by the Planning Commission and adoption by the Board of Supervisors, pursuant to Section 302 of the City Planning Code.

The project is proposed for Conditional Use authorization (approvable by the City Planning Commission) as a Planned Unit Development (PUD), under the provisions of Sections 303 and 304 of the Planning Code. According to the Code, PUD procedures

"are intended for projects on sites of considerable size, developed as integrated units and designed to produce an environment of stable and desirable character which will benefit the occupants, the neighborhood and the city as a whole. In cases of outstanding overall design, complementary to the design and values of the surrounding area, such a project may merit a well reasoned modification of certain of the provisions contained elsewhere in this Code." (Section 304 (a). A PUD must meet the criteria for Conditional Uses in Section 303(c) and elsewhere in the Planning Code. In addition, it must promote applicable objectives of the Master Plan, provide adequate off-street parking and usable open space at least equivalent to Code required open space, and meet other requirements of Planning Code Section 304(d). The project's proposed commercial space also requires Conditional Use approval for a new non residential use in an RM district. This approval would be sought as part of the Conditional Use process for the PUD. Conditional Use approval may be appealed to the Board of Supervisors.

The project must obtain approval as a condominium subdivision, requiring a finding by the Planning Commission that the project would be in conformity with the City's Master Plan (San Francisco Subdivision Code, Section 1332) and approval by the Department of Public Works.

Subdivisions of 50 or more units must provide a minimum of 10% low and moderate income housing, as defined in Section 1341(c) of the San Francisco Subdivision Code, unless the Planning Commission finds that public subsidies are not available (Section 1341(a)).

Notes: Project Description

1. Both are located at 300 Montgomery Street, San Francisco, California 94104.

III. ENVIRONMENTAL SETTING

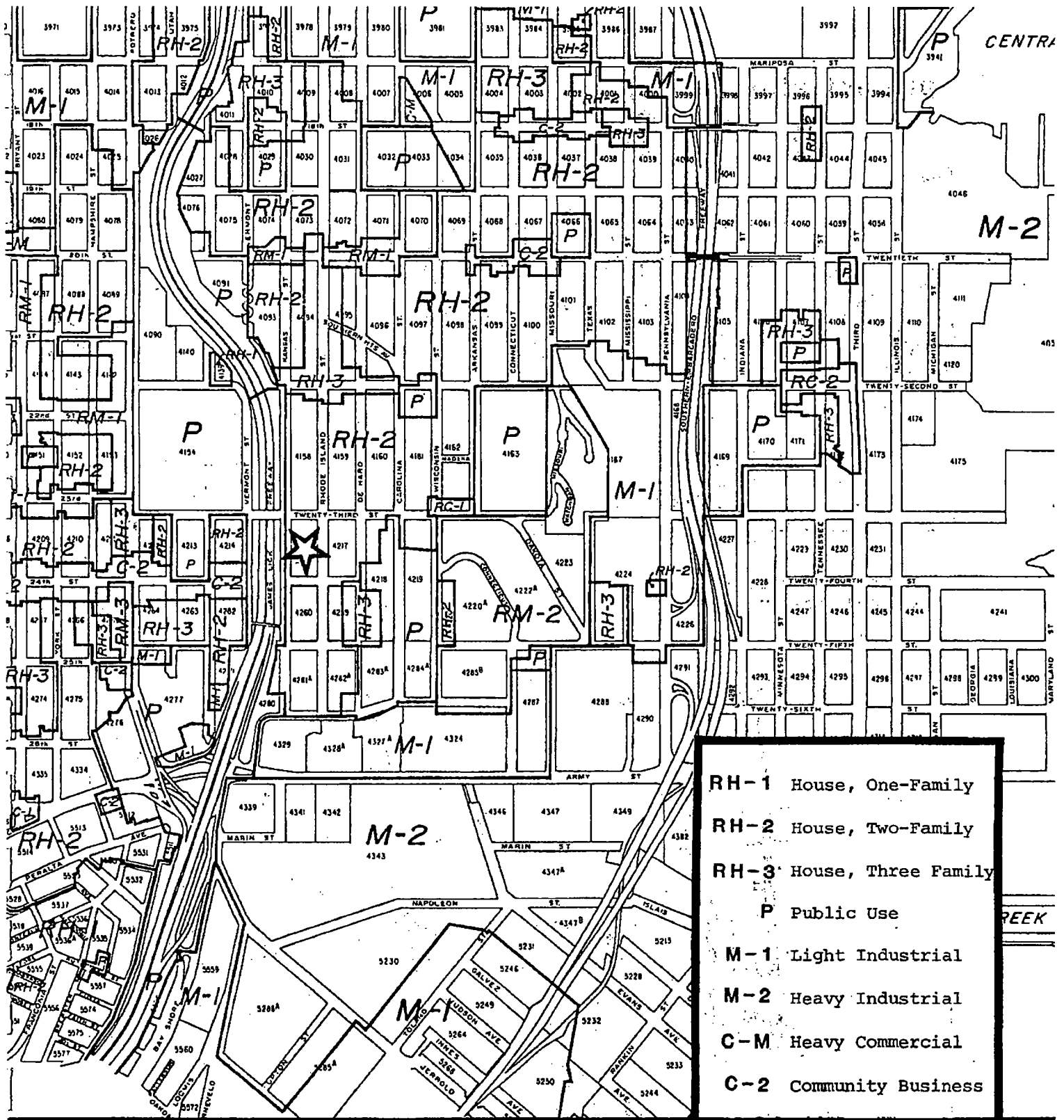
A. Land Use and Zoning

The project block is surrounded on 3 sides by an RH-2 (House, Two-Family) zoning district; two-family homes predominate. To the West is the James Lick Freeway, see Exhibit 12, page 19. With the exception of a grocery store, beneath 6 residential units on the northeast corner of Kansas and 23rd Streets across the street from the site, and the Freeway, both of which are shown in Exhibit 13 (page 20), surrounding land use on the east side of the Freeway is residential. Exhibit 14 (page 21) shows the land uses surrounding the site.

The neighborhood is predominantly made up of 2- and 3-story row houses (Exhibit 15, page 22). Eucalyptus trees line the western edge of Kansas Street along the right-of-way of U.S. 101 (James Lick Freeway), which is approximately 100 feet from the project site. San Francisco General Hospital is approximately 400 feet from the site across the Freeway.

The site contains a complex of 16 structures. The largest building, the warehouse structure, which would be retained, occupies the southwest corner of the site at 24th and Kansas Streets (see Exhibit 6, page 10). Other structures to be retained are the garage, chimney and retaining walls on Rhode Island and the first floor brick wall at the corner of 23rd and Kansas Streets, as shown on Exhibits 4 and 5, pages 8-9.

The so-called Wisconsin Street Housing Site, in the area generally between DeHaro, 23rd, Wisconsin, and 26th Streets, has been proposed for development for many years by various sponsors. The site was used for World War II housing which was demolished and cleared in the 1960's. Exhibit 16 (page 23) shows the relationship of the Wisconsin Street site to the proposed project. The closest part of the Wisconsin site, at DeHaro and



Zoning



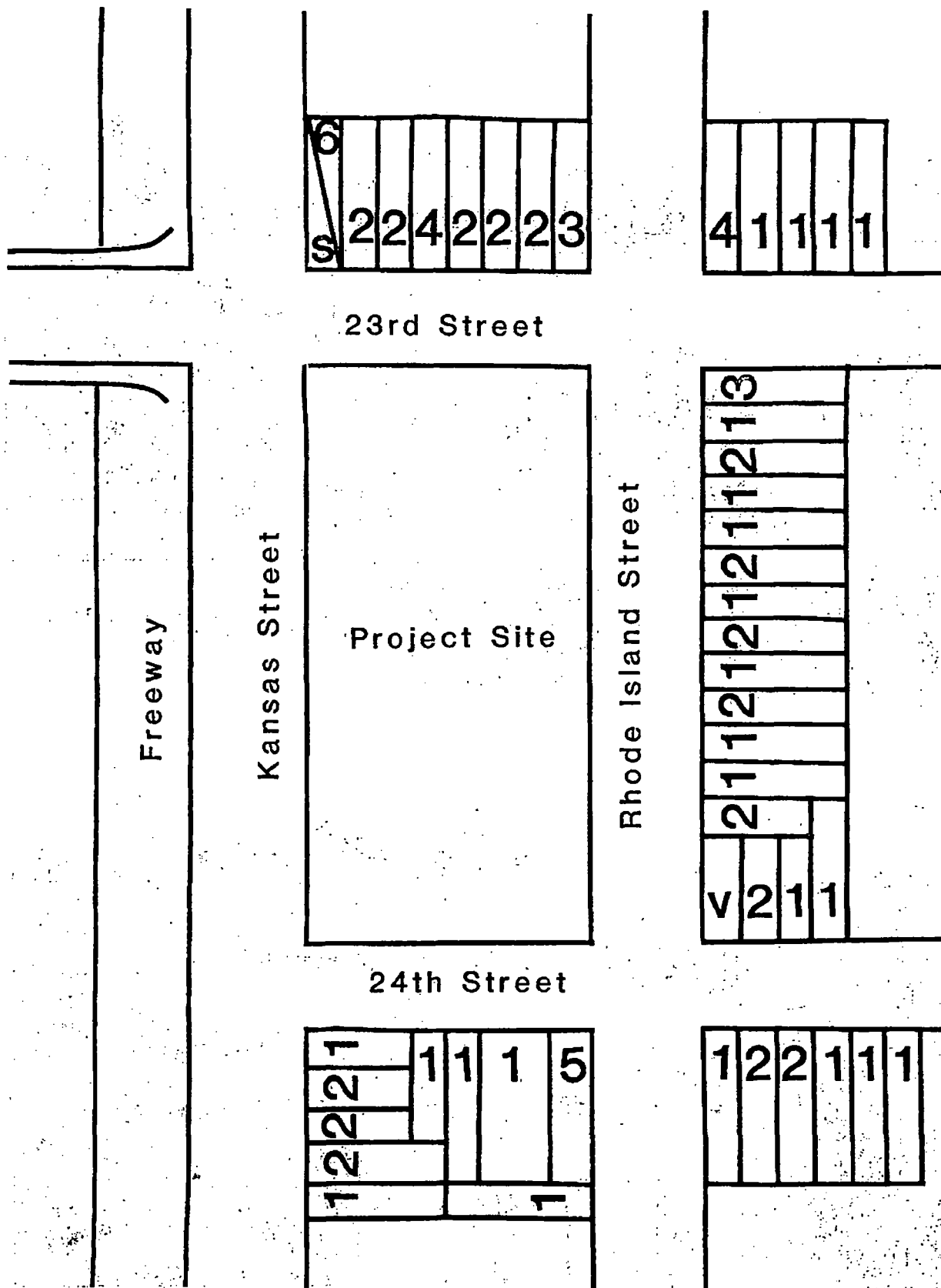
0 800'



Source: Zoning Map of the City and County of San Francisco

Exhibit No. 12





Existing Land Use

Numbers represent the number of units per lot

Not to scale

V Vacant

S Store



Exhibit No. 14



24th Streets, is a block away. The Potrero Hill Neighborhood Improvement Plan recommends development of 175 family units, "including a substantial amount of dwelling units for lower income households"¹ for the Wisconsin site. In February 1981 the Board of Supervisors initiated a proposal to rezone the property from P (Public) to RH-2; environmental review, City Planning Commission approval and Board adoption are expected to occur during 1981. There is no presently active development proposal for this site.

City Planning files indicate several other recent or proposed projects in the vicinity of the proposed project. In 1978 an apartment project, one half block from the proposed project, was completed at 2120 24th Street and 3 duplexes were completed at 205-207 Arkansas Street, 9 blocks northeast of the proposed project. Three warehouse buildings have been proposed for 1453 25th Street, 7 blocks east of the project. (Building Permit Application Number 7812869 and Office of Environmental Review Case Number EE 78.420).

The nearest RM-2 (Residential, Mixed District, Moderate Density) zoning, is 3 blocks from the site, east of Wisconsin Street. RH-3 (Residential, House, Three-Family) Districts are a block north and a block southeast of this site. A small RC-1 (Residential, Commercial Combined, Low Density) area is 3 blocks east at 23rd and Wisconsin, adjacent to the RM-2 area. A C-2 (Community Business) district extends along 24th Street, west of the Freeway and M-1 (Light Industrial) districts are found about 2400 feet east and 2 blocks south of the site. Although there is a mix of zoning and land use in the area, the site is surrounded by residential uses.

Notes: Land Use and Zoning

1. San Francisco Department of City Planning, Potrero Hill Neighborhood Improvement Plan, endorsed by the Planning Commission, 3 August 1978, Resolution 8036, page 14.

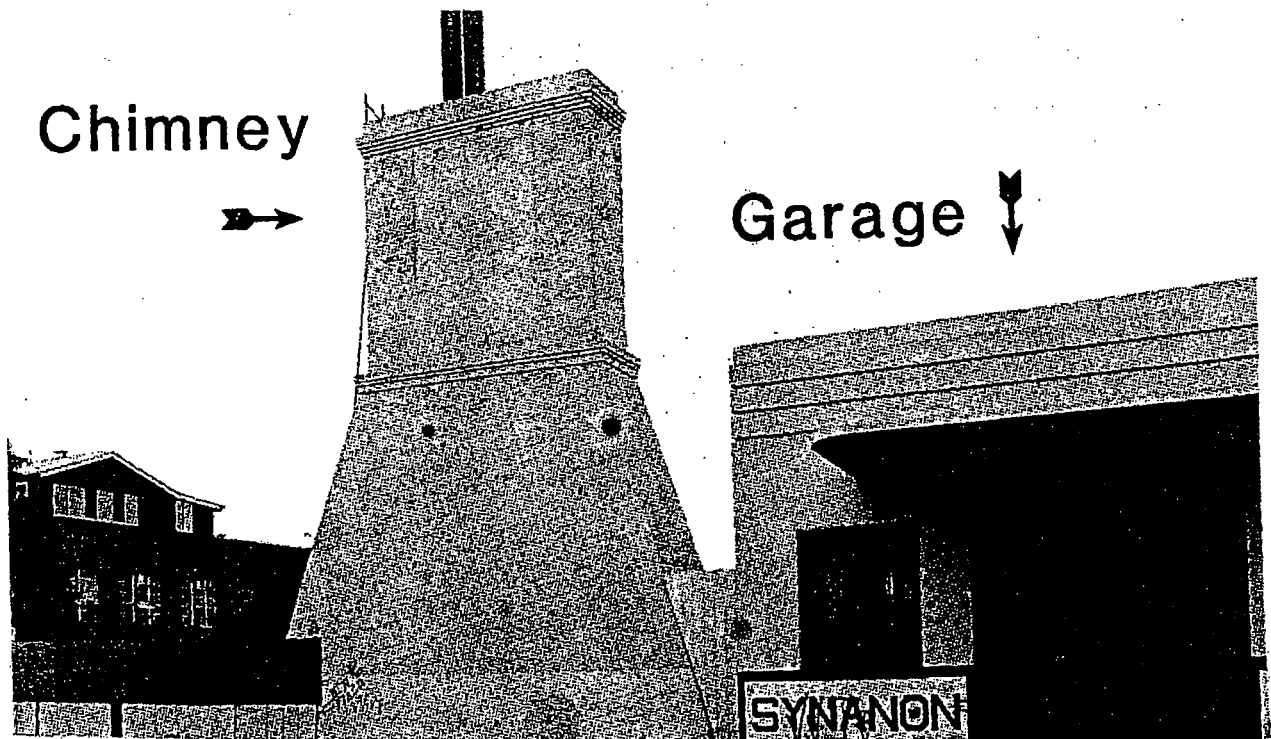
B. History of the Site

The San Francisco Pioneer Varnish Works, owned by the Hueter Bros. & Co. (Gustave and Ernest L. Hueter), dealers in paints, oils, and artists' materials, was established in 1858. Hackett (1884) states that the factory "is located on Sonoma¹ Street, between Twenty-third and Twenty-fourth Streets, and covers one city block with its buildings and accessions, erected after the latest European plans... The trade of this house is very great, extending so far as Sydney and Melbourne. At the World's Fair in 1879, at Sydney, its varnishes were awarded the highest premiums."² A chimney built as part of the paint manufacturing plant would be retained in the proposed project (Exhibit 17, page 26). It is listed in the San Francisco Department of City Planning's 1976 Architectural Survey, an inventory of structures of architectural significance. The chimney is rated "3" in this inventory.³

In 1906 the northern half of the site was owned by the Hueter Bros. and the southern half was owned by E. L. Hueter and J. J. Wentworth.⁴ The warehouse at 24th and Kansas Streets, which would be retained in the proposed project, was designed by W. H. Ellison, Consulting Engineer, then of 369 Pine Street in San Francisco and was built by Barrett and Hilp in the twenties.⁵

National Lead Company (Dutch Boy, Inc.) purchased the site in 1930 and continued paint manufacture until the site was acquired by the private Synanon organization in 1971. Synanon Inc. used the site as San Francisco work headquarters and residential facility. Synanon facilities included various workshops, * printshops, automotive repair shops and other work areas. Synanon sold the site to the project applicant in early 1980. There is currently no authorized activity on the site.

Prior to the present RH-2 zoning the site was zoned R-3 which permitted one dwelling unit per 800 square feet of lot. Under R-3 zoning 100 units could have been built on the site. The paint manufacturing plant was a nonconforming use with a 2 May 1980 termination date.



Chimney and Garage to be Retained

Notes: History of the Site

1. Street names and some street alignments changed in this area about the turn of the century. It is not certain whether this refers to the present site or a block further east.

2. Hackett, Fred, H., editor, Industries of San Francisco, Payot, Upham & Co., Publishers, San Francisco, 1884, pp. 122-3 (Available at San Francisco Public Library).

3. Jonathan Malone, Administrative Assistant, Landmarks Preservation Advisory Board, personal communication, 21 January 1981. Each structure is numerically rated according to its overall architectural significance. The ratings range from a low of "0" to a high of "5". Factors considered include architectural significance, urban design context, and overall environmental significance. The architectural survey resulted in a listing of the best 10% of San Francisco's buildings.

4. The Hicks-Judd Company, The San Francisco Block Book, 4th Edition, 1906. (Available at San Francisco Public Library.)

5. San Francisco Department of Public Works, Central Permit Bureau, Building Permit filed 23 April 1923.

C. Transportation

Street Characteristics. Major thoroughfares¹ nearest the site are Potrero Ave., 4 blocks west, and Army St., 3 blocks south. The site is adjacent to the James Lick Freeway (U.S. 101) with connections north and south at Army St., about 1000 feet south of the site. The connection from the south does not allow left turns from Army St. onto Vermont St.; thus freeway access from the south is more convenient at Mariposa St. (from the Vermont St. exit), 5 blocks north of the site. (See Exhibit 18, page 29).

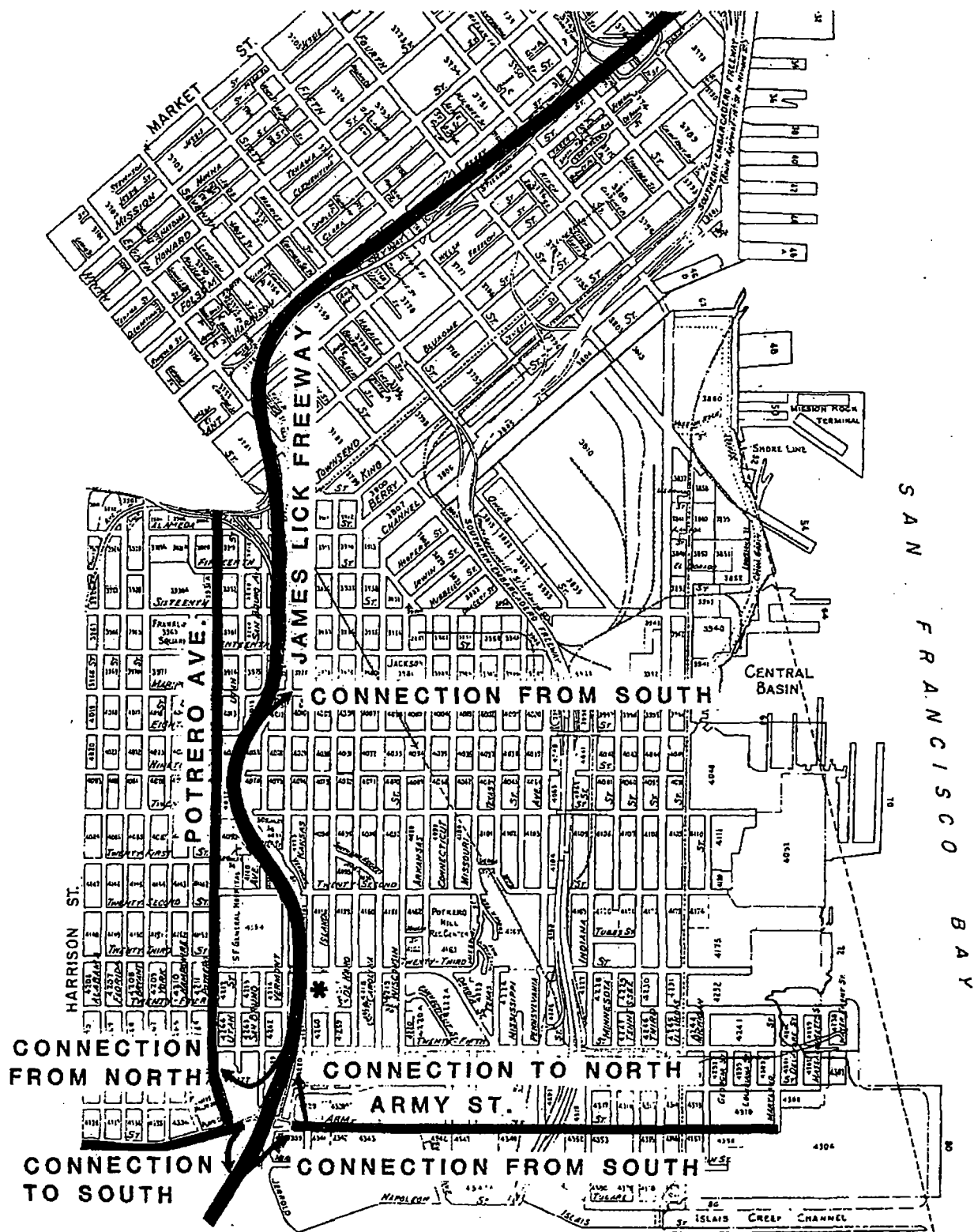
The characteristics of surrounding streets are given in Table 2.

TABLE 2: STREET CHARACTERISTICS

<u>Street</u>	<u>Right of Way</u>	<u>Travel Lanes</u>	<u>Parking Lanes</u>	<u>Sidewalks</u>
23rd St.	66'	2 @ 12'	2 @ 9'	Both sides, 12'
Rhode Island St.	80'	2 @ 15'	2 @ 10'	Both sides, 15'
24th St.	66'	2 @ 12'	2 @ 9'	Both sides, 12'
Kansas St.	80'	2 @ 15'	2 @ 10'	West side, 5' East side, 15'

Traffic volume on 23rd St. is about 3070 vehicles per day,² on Rhode Island St. about 750 vehicles per day, on 24th St. about 100 vehicles per day and on Kansas St. about 2100 vehicles per day.³

The 23rd and Kansas St. intersection is controlled by a 2-way stop on Kansas St. The capacity of that intersection is about 1175 vehicles per hour.⁴ About 680 vehicles pass through the intersection in the evening peak hour (4:15 to 5:15 p.m.),⁵ at level of service A. (See traffic counts and definitions of levels of service in Appendix B, pages 122-126.)



Street Map Showing Connections To & From James Lick Freeway



* Project Site

Freeway

Major Thoroughfare

The nearest signalized intersection is at 23rd and Potrero Sts., 4 blocks west, which operates at level of service C or better in the evening peak hour.⁶

There are no transit preferential lanes on any of the streets surrounding the site.

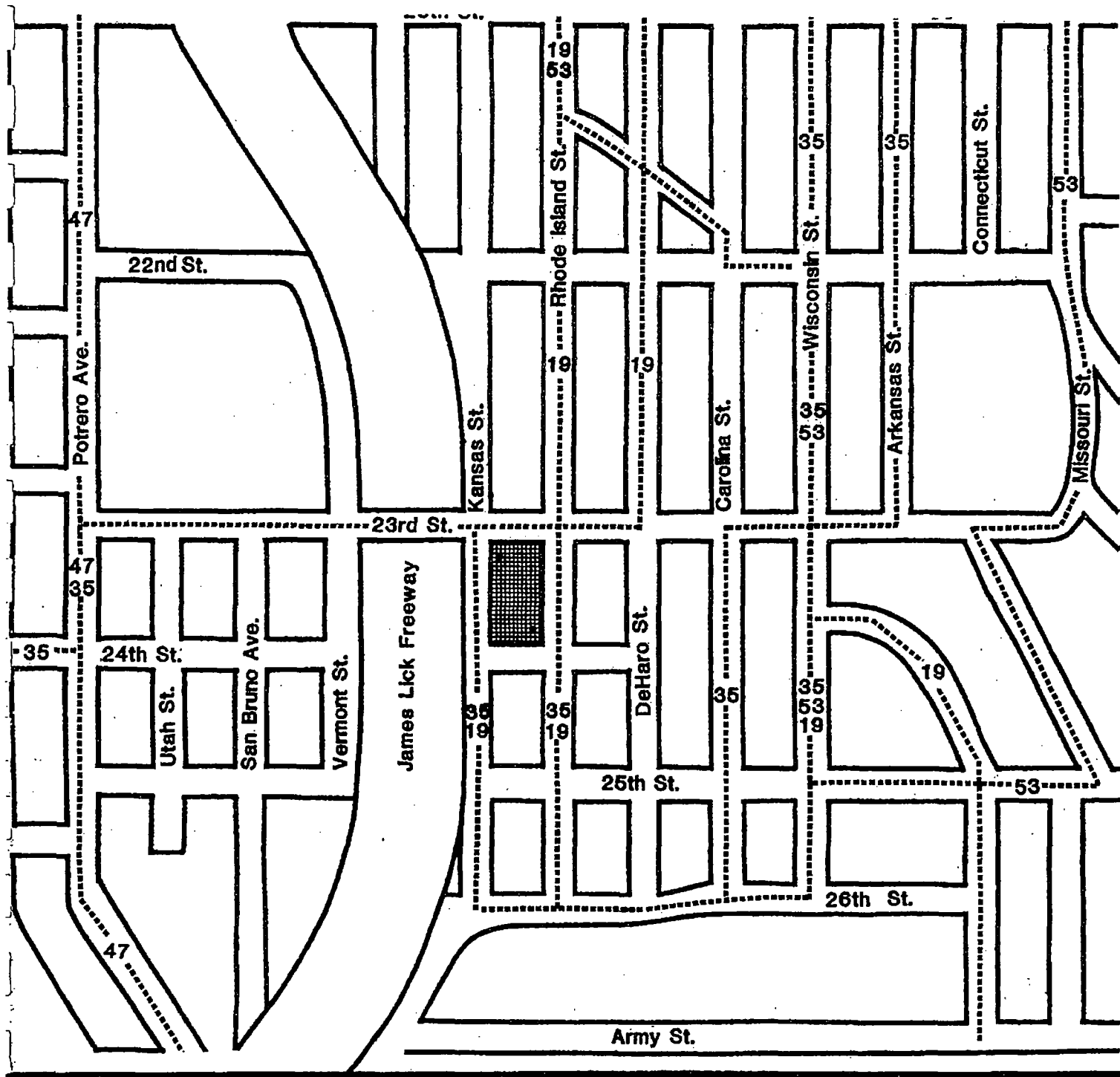
Transit. Four MUNI bus routes run adjacent to or near the site: 53-Southern Heights, 35-Eureka, 19-Polk, and 47-Van Ness (see Exhibit 19, page 31).

Pedestrians. Pedestrian volumes on the sidewalks surrounding the site are relatively low. The highest volumes occur at the corner of 23rd and Kansas during the peak (5:00 - 6:00 p.m.) hour.⁷ Pedestrian movement is at a level of service A (less than 60 pedestrians per hour on 23rd and 24th Sts. and less than 75 pedestrians per hour on Kansas and Rhode Island Sts.)⁸

Bicycles. The Transportation Element of the Comprehensive Plan designates no streets surrounding the site as bicycle routes. The closest designated route is on Bryant St., 7 blocks west.

Parking. Except for the facilities at San Francisco General Hospital, a block from the site across the Freeway, there are no off-street parking lots within 1/4 mile of the site. There are no special loading zones on any of the streets surrounding the project except for a bus stop on Kansas at 23rd as shown on Exhibit 3, page 6.

On-street parking surrounding the site includes curbside parking as follows: a total of 30 spaces on the 2 sides of Kansas St., 17 spaces on the west side of Rhode Island St., 9 spaces on the south side of 23rd St., and 8 spaces on the north side of 24th St., a total of 64 spaces.



Transit Service

----19---- MUNI Bus Routes



Project Site

• Bus Stop

Not to scale



Exhibit No. 19

These parking spaces are currently used by neighbors or by commuters, primarily San Francisco General Hospital employees. For all streets surrounding the site, parking occupancy averages approximately 50%, ranging from 90% on Kansas St. to 10% on Rhode Island St.⁹ Field observation of drivers using local parking spaces indicate that approximately 50% of daytime users are generated by San Francisco General Hospital (SFGH) (8:00 a.m. - 6:00 p.m.) and approximately 20% are generated by SFGH in the evening hours.⁹

Notes: Transportation

1. Major Thoroughfare: A cross-town street whose primary function is to link districts within the City and to distribute traffic from and to the freeways; a route generally of citywide significance; as identified in the Thoroughfare Plan of the Transportation Element of the San Francisco Comprehensive Plan.
2. This may be compared to a traffic count taken on 5 October 1976 at the intersection of 23rd and Vermont Streets. Increasing the 1976 traffic count by 2% per year per information from Nelson Wong, San Francisco Department of Public Works, Traffic Engineering Division, telephone conversation, 29 January 1981, traffic at that intersection would be expected to be 5700 vehicles per day.
3. EIR Consultants, Ted Kreines, and Richard K. Hopper, P.E., field observations, 4 February 1981. Traffic counts on these 4 streets were taken for the evening peak hours (4:15 to 5:15 p.m.). This evening peak hour is assumed to be 10% of the total daily traffic. This assumption is based on data from the San Francisco Department of Public Works, Traffic Engineering Division, Map, Evening Peak Hour Traffic Flow on Principal Streets and Highways, 1974-1976 and Map, Twenty-Four Hour Traffic Flow on Principal Streets and Highways, 1974-1976.

4. Calculation method from: Institute of Transportation Studies, "Fundamentals of Traffic Engineering," 8th Edition, 1973, p. 7-7.

5. EIR Consultant, Ted Kreines, field observation, 4 February 1981.

6. Scott Shoaf, San Francisco Department of Public Works, Traffic Engineering Division, telephone conversation, 3 July 1980 and reference 4 above.

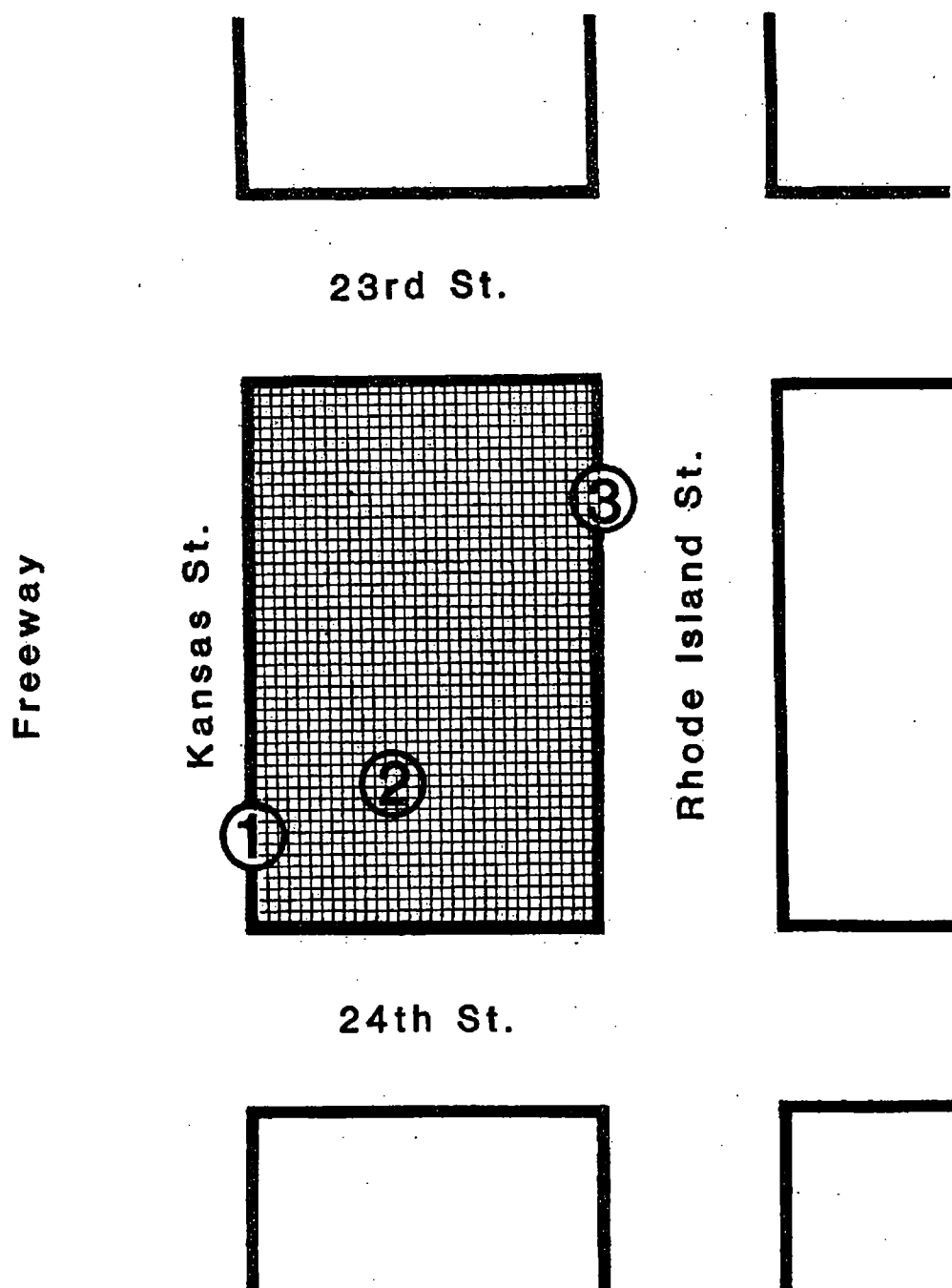
7. 1.3 pedestrians per minute: field observation by Ted Kreines, 4 February 1980.

8. "Pedestrian Planning & Design," John J. Fruin, Metropolitan Association of Urban Designers & Environmental Planners, Inc., New York, 1971, p. 78.

9. EIR Consultants Richard K. Hopper, P.E., 7 July and 15 July 1980 and Ted Kreines, 4 February 1981.

D. Noise

Acoustical measurements were taken at three locations (shown on site map, Exhibit 20, page 34) to quantify existing noise conditions at the site area:¹ on Kansas Street approximately 100 feet from the near lane of traffic on Route 101; in the courtyard in the center of the existing building complex on the site; and on the west side of Rhode Island Street between 23rd and 24th Streets. The three positions were chosen as representative of the noise environment of the block: noise levels at point 1 represent exposure of project units which would front toward the Freeway; point 2 represents levels within the proposed courtyard; and point 3 represents noise exposure of the nearby residential area and units which would front on Rhode Island. A summary of the noise measurements is given in Table 3 (page 35). The noise



Noise Measurement Positions



Project Site



Source: Charles M. Salter Associates, Inc.

Exhibit No. 20

TABLE 3: AMBIENT NOISE MEASUREMENTS

<u>Location of Measurement</u>	<u>Day and Time</u>	<u>L₁</u>	<u>L₁₀</u>	<u>L₅₀</u>	<u>L₉₀</u>	<u>L₉₉</u>	<u>L_{eq}</u>	<u>Comments</u>
Site 1. On Kansas Street, 60 feet from building corner at 24th Street, on 3rd Floor of building, 1 meter from facade, 100 feet to nearest lane of freeway.	18 July 1980 5:10-5:20 pm	79	77	76	74	74	76	8-lane freeway depressed 20 feet below grade.
Site 2. In courtyard 120 feet from building edge at 24th Street and 120 feet from building edge at Kansas Street, 2 meters from ground.	18 July 1980 5:30 pm	--	57	57	55	--	56	Steady noise from freeway through gate/entry on Kansas Street
Site 3. Near curb toward Rhode Island Street 60 feet from 24th Street building edge, 15 feet from building facade.	18 July 1980 5:50 pm	85	69	60	56	--	70	5 minute sample with bus.
		--	64	60	58	--	61	5 minute sample without bus.

The L₁₀, L₅₀ and L₉₀ are statistical descriptors indicating the noise levels which were exceeded 10, 50 and 90 percent of the time period, respectively. The L_{eq} is the equivalent sound level and is an alternative method for describing the average noise level.

-- No measure taken.

Source: Charles M. Salter Associates, Inc.

environment is dominated by noise from eight lanes of freeway traffic, and by bus traffic noise on Rhode Island, 23rd and 24th Streets. The acoustical consultant characterizes the area as "generally noisy."²

The Environmental Protection Element of the Master Plan predicts a background noise level of 65 L_{dn} ³ for this site. Actual measurements showed the site to be noisier on Kansas Street, estimated at 75 L_{dn} ⁴ on the basis of short-term measurements, because this side of the site is next to the Freeway. In the courtyard the L_{dn} drops to about 55-60 dBA; on the Rhode Island side it is 60-65 dBA, with peak noise at 85 dBA when buses pass by.⁵

Notes: Noise

1. Measurements made by Charles M. Salter Associates, Inc., under contract to EIR consultant Kreines and Kreines.

2. Acoustical Consulting Report for 2222 Limited EIR, Charles M. Salter Associates, Inc., 28 August 1980. Available for public review at the City Planning Office of Environmental Review, 45 Hyde Street, Room 319.

3. Decibel: A logarithmic unit of sound energy intensity. Sound waves, traveling outward from a source, exert a force known as sound pressure level (commonly called "sound level"), measured in decibels.

dBA: Decibel corrected for the variation in frequency response of the typical human ear at commonly-encountered noise levels.

L_{dn} : An averaged sound level measurement, based on human reaction to cumulative noise exposure over a 24-hour period, which takes into account the greater annoyance of nighttime noises. Noise

between 10 p.m. and 7 a.m. is weighted 10 dBA higher than daytime noise.

4. For the purposes of this report L_{dn} has been considered to be equivalent to CNEL. CNEL = Community Noise Equivalent Level; similar to L_{dn} except that sound level measurements taken between 7 p.m. and 10 p.m. are weighted 5 dBA higher than daytime sounds in addition to the 10 dBA 10 p.m. to 7 a.m. weighting.

5. L_1 : 85 dBA, the noise level exceeded during the 1% noisiest time.

E. Topography and Geology

The site is bounded by 4 streets with varying slopes: 24th Street has a slope of 13%; 23rd Street has a slope of 7%; Kansas Street has a slope of 4%; and Rhode Island Street has a slope of 1%.

The site has a cross-slope of 5.2%, measured from the northwest to southeast corners, representing a grade change of 24 feet within a distance of 452 feet.

The site slopes down to the west at a ratio of approximately 6 horizontal to 1 vertical (6:1). Borings drilled by the soils engineer¹ indicate that the site is generally underlain by 2 to 10 feet of fill. Fifteen feet of sand fill were found on the east side of the site. Under the fill is clay, sand, and gravel; below these are shale and serpentine rock. Groundwater level is below the level of the borings.

The fill would not provide adequate foundation support, and so would have to be removed down to the natural soil level, to provide a suitable base for project building foundations.

The San Andreas, Hayward, and Calaveras earthquake faults are 7 miles southwest and 12 and 20 miles northeast of the site,

respectively.² The soils on the site are not subject to liquefaction³ or settlement in case of an earthquake.

Notes: Topography and Geology

1. This section is based on the 17 November 1980 report by Warren Wong (California license No. CE 25777), Geo/Resource Consultants for project sponsor: "Geotechnical Investigation, Proposed Potrero Hill Housing Development, 24th and Kansas Streets, San Francisco, California."
2. A map showing the location of these faults with respect to San Francisco can be found on page 48 of Final EIR EE 79.57, Daon Building, San Francisco City Planning Commission, 12 June 1980, and is hereby incorporated by reference. That EIR is available for public review at the Department of City Planning, Office of Environmental Review, 45 Hyde Street, Room 319.
3. Liquefaction: Earthquake-induced transformation of a stable granular material, such as sand, into a fluidlike state, similar to quicksand.

F. Plants

The site is urbanized. Three, 8-inch diameter eucalyptus trees, are growing on the site along the Rhode Island Street wood fence. There are 7 street trees in sidewalk planters along 24th Street, and one in a sidewalk planter on 23rd Street.

IV. ENVIRONMENTAL IMPACT OF THE PROPOSED PROJECT

A. Land Use and Zoning

Rezoning would be required in order to permit the proposed 132 units on this site. Table 4 shows the density which could be permitted by various zoning districts on this 80,000-square-foot site. Present RH-2 zoning would permit 53 units, and RM-2 (proposed) or RC-2 zoning would permit 133 units. Thus, the project would include 80 more dwelling units than presently allowable. RM districts allow more variety of building sizes and designs than RH districts. According to Planning Code Section 206.2, RM districts "...are intended to recognize, protect, conserve and enhance areas characterized by a mixture of houses and apartment buildings, covering a range of densities and building forms...and contain supporting non-residential uses." New non-residential uses in RM districts are permitted with conditional use authorization. RC districts are characterized by structures combining residential and first floor, neighborhood-serving commercial uses, with less of a rear yard requirement than comparable RM districts. The proposed project would have residential units over commercial space. As the housing over a grocery on the north side of Kansas and 23rd is the only other such arrangement in the immediate neighborhood, RC zoning would not be as likely to be recommended or approved as would RM zoning. Project sponsor proposes to apply for RM-2 zoning with a conditional use authorization for the commercial space. Some of the units would have private terraces.

RM-2 districts require 80 square feet per unit of private usable open space, or 107 square feet of common usable open space per unit. The project would provide 29,160 square feet of common usable open space, or about 175 square feet per unit.

New construction would comply with the 40-foot height limit. The sponsor originally proposed to renovate the penthouses on top of the building at 24rd and Kansas Streets. No construction permit appears to have been issued for these penthouses. As they were constructed without a permit, they must be demolished rather than renovated. The main portion of the building, about 60 feet tall on the Kansas Street frontage, was constructed pursuant to a 1923 building permit application and, therefore, present height limits do not apply.

TABLE 4. ALLOWABLE HOUSING DENSITY BY ZONING DISTRICT

District	Required sq. ft. per unit	Maximum number of units
RH-2, Residential, House District, Two Family (present zoning)	1500 ¹	53
RH-3, Residential, House District, Three Family	1000 ¹	80
RM-1, Residential Mixed District, Low Density	800	100
RC-1, Residential-Commercial Combined District, Low Density	800	100
RM-2, Residential Mixed District, Moderate Density (proposed zoning)	600	133
RC-2, Residential-Commercial Combined District, Moderate Density	600	133
RM-3, Residential Mixed District, High Density	400	200
RC-3, Residential-Commercial Combined District, Medium Density	400	200

¹ Development at this density requires conditional use permit.

B. Historic Structure

The chimney, described on page 25, would be retained as a symbol of the long history (over 100 years) of industrial use of the site.

C. San Francisco Comprehensive Plan and Other City Policies

This EIR section compares the proposed project with the Residence and Urban Design elements of the San Francisco Master Plan. Other Master Plan elements, such as Transportation, are discussed in the appropriate sections of this EIR.

Residence Element. The project would comply with Objective 2, Policy 1 of the Residence Element, "In existing residential neighborhoods, ensure that new housing relates well to the character and scale of surrounding buildings and does not reduce neighborhood livability", to the extent that the design succeeds in its intent to relate to development across the street. The scale of the proposed project would be larger than that of the surrounding residential development. The most massive element in the proposal is the existing building at Kansas and 24th Streets which is to be renovated. As this building has been on the site for nearly 60 years, it is part of the existing neighborhood scale.

The project would comply with Objective 2, Policy 2, "Encourage the conversion of underused non-residential land to residential use..." by converting an unused industrial site in a non-industrial area to residential use.

The project would comply with Objective 2, Policy 4, "Encourage construction of a variety of units suited to the needs of households of all sizes", by providing a mix of sizes of units from studios to 3-bedroom units.

The project would comply with Objective 3, Policy 2, "Allow small-scale non-residential activities in residential areas where they contribute to neighborhood livability", by providing pedestrian and neighborhood-oriented retail stores in an area where, except for one grocery, the nearest shopping area is on the other (west) side of the Freeway.

Objective 4, Policy 1, states, "Preserve and expand the supply of low and moderate income housing." The project would not comply with this policy unless a subsidy is available.

Urban Design Element. The project would comply with Objective 2, Policy 4 of the Urban Design Element, "Preserve notable landmarks and areas of historic architectural aesthetic value, and promote the preservation of other buildings and features that provide continuity with past development", to the extent feasible, by preserving the incinerator and those buildings and walls that are structurally safe and appropriate for reuse (listed in the project description, page 4).

The project would comply with Objective 3, Policy 5, "Relate the height of buildings to important attributes of the city pattern and to the height and character of existing development", and Policy 6, "Relate the bulk of buildings to the prevailing scale of development to avoid an overwhelming or dominating appearance in new construction", to the extent that it would preserve the present height and bulk pattern and hollowed square building configuration of the present site development, although buildings on the site are taller and more massive than the surrounding residential development. (They are not as large-scale as the San Francisco General Hospital buildings about a block away, but those are probably less relevant to the character of the project area, because they are on the other side of the Freeway.)

The project would comply with Objective 4, Policy 2, "Provide buffering for residential properties when heavy traffic cannot be avoided", by design measures such as double pane glass to protect dwellings on the west side of the project from freeway impacts, and by creating a wall to buffer noise on the Kansas Street side.

Potrero Hill Neighborhood Plan. The proposed project would comply with policies in the Neighborhood Plan, "Housing Strategy C - Increase opportunities for Potrero Hill renters to become home owners." and "Economic Development Strategy B - Promote reuse and rehabilitation of the underutilized commercial and industrial facilities as well as the retention and expansion of existing activities.", by providing housing in the Potrero area on an underused industrial site. The Neighborhood Plan calls for "theme trees" along 23rd Street and street trees are also required by Section 143 of the Planning Code. No landscaping plan has been developed yet, so it is not known whether the project would comply with the "theme tree" policy.

D. Socioeconomics

Employment. Based on a March 1981 estimated construction cost of \$10,200,000, the project would generate approximately 60% of that, or \$6,120,000, for gross labor costs.¹

The completed project would create full-time employment for approximately 22 persons. Nineteen would be employed in the commercial space, based on an estimate of one person per 450 gross square feet of commercial space.¹

The condominiums would employ three persons, an on-site manager, janitor and mechanical maintenance person. Other employment would be generated for additional project management, landscape, and elevator maintenance; and security personnel. These could be part-time positions.

Revenues. Municipal tax revenues to the City and County of San Francisco generated by the proposed project have been estimated in 1980 dollars at 1980-81 tax rates (see Table 5, page 44). Total annual revenues to the City would be about \$200,000 (1980 dollars) at those rates.

The projected revenue does not include the 1-1/2% tax on selling the condominium units, a tax paid once at the time of sale of each unit. Total estimated revenue to the City from this source would be about \$240,000 (1980 dollars).

Economic Effect of Victoria Mews on Potrero Hill. The Potrero Hill Advisory Committee has requested² a study of the Victoria Mews project (bounded by 19th, 20th, Carolina and Wisconsin Sts.), comparing housing prices in that particular residential neighborhood before and after completion of Victoria Mews, in order to find out if that development caused prices on Potrero Hill to rise more rapidly than they would have otherwise. Statistical analyses of this type are difficult because of variation in size and design from one project to another which causes prices to vary and the inherent inability to obtain local

TABLE 5: ESTIMATED PROJECT-GENERATED MUNICIPAL TAX REVENUES
IN 1980 DOLLARS, CALCULATED AT 1980-81 TAX RATES¹

<u>Tax</u>	<u>Amount</u>
San Francisco Property Tax	\$147,000
San Francisco Unified School District	13,000
San Francisco Community College District	1,000
BART	900
BAAQMD ²	<u>400</u>
Total Non-Bond Property Tax	\$162,300
Bond Retirement	39,000
Payroll	<u>1,800</u>
Total Annual Tax Revenue	\$203,100

¹ Calculated on a basis of average unit price of \$123,000, \$16,200,000 = total sales price = market value; assessed value = 25% market value; \$4/\$100 assessed valuation non-bond tax rate; \$0.97/\$100 assessed valuation for bond retirement; distribution of taxes as in 1980; payroll tax calculated on the assumption that 1/2 or 11 on-site jobs would qualify for payroll tax and that average gross income would be \$15,000

² BAAQMD = Bay Air Air Quality Management District.

information about sales uninfluenced by the presence of that project; it is thus impossible to identify what the neighborhood prices would have been without Victoria Mews.

The data in Table 6, page 45, on prices in Victoria Mews, the Victoria Mews area, and the proposed project area are meant to be suggestive only, as inferences from such a small sample are statistically unreliable. The data suggest that housing prices on Potrero Hill are rising at a faster rate than in San Francisco as a whole and that housing prices at Victoria Mews are rising faster than on the rest of Potrero Hill.

TABLE 6: COMPARATIVE SALE AND RESALE PRICES OF POTRERO HILL HOUSING

Location	Earliest Sale Price in Dollars and Year Sold	Latest Sale Price in Dollars and Year Sold	Overall Percentage Increase	Annual Percentage Increase
<u>Project Area</u>				
2110 - 23rd Street (2-family structure)	\$54,000 (1973)	\$103,000 (1980)	91%	13%
25th Street between Rhode Island and Kansas Streets (Single-family house)	\$25,000 (1976)	\$ 75,000 (1980)	200%	50%
1254 DeHaro Street (2-family structure)	\$40,000 (1977)	\$138,000 (1979)	245%	123%
<u>Victoria Mews</u>				
2 bedroom unit	\$120,000 (1978)	\$188,000 (1980)	57%	29%
2 bedroom unit with deck	\$154,000 (1978)	\$300,000 (1980)	95%	46%
<u>Victoria Mews Area</u>				
20th and Wisconsin Streets (Single-family house)	\$ 65,000 (1954)	\$280,000 (1980)	331%	13%
18th Street between De Haro and Rhode Island Streets (Single-family house)	\$ 58,000 (1975)	\$138,000 (1980)	140%	28%
20th and Carolina Streets (6-unit apartment building)	\$160,000 (1976)	\$495,000 (1980)	209%	52%

Source: Edward E. Pendergrass, Peterson Associates Realtor, 1447 20th Street, San Francisco, personal communication, 5 September 1980. Formerly a real estate salesperson for Victoria Mews and currently a real estate salesperson for the Potrero Hill area.

Notes: Socioeconomics

1. San Francisco Department of City Planning, FEIR, Ocean Beach Park Estates, EE 78.178, 30 August 1979, p. 126.

2. Potrero Hill Advisory Committee, special meeting, 8 July 1980.

E. Transportation

The project would generate a total of about 740 one-way vehicle trips per day, about 340 condominium-related, 370 for the commercial space, and 30 commercial/residential delivery and service trips. (See Table 7, page 47.)

1981 counts made for this EIR (discussed in Setting, page 28) agree with counts at 23rd and Vermont made by the Department of Public Works in 1976, within probable measurement error, and show that the peak hour for traffic on 23rd St. is 4:15 - 5:15 p.m. As 23rd is the busiest street in the area, project impacts on traffic flow on 23rd could potentially have the greatest effect. The peak in project generated traffic, 88 vehicles per hour,¹ would occur later than the total traffic peak, or from 5:00 to 6:00 p.m.

During the 4:15 to 5:15 peak traffic hour the project would be expected to generate 59 trips. It is estimated³ that 60% of the project's 59 peak hour trips, or about 20 trips, would be added, for a traffic increase of about 4% over the present peak hour traffic volume of about 520 vehicles on 23rd Street.² This increase would not change the present traffic Level of Service A (free flow).

On Kansas St. about 10 vehicles would be added to the peak hour 220, an increase of about 5% which would not affect the flow of traffic. Addition of about 5 trips to the peak hour volume of about 70 on Rhode Island and 4 trips to the peak volume of 10 trips on 24th St. would increase traffic by about 7% and 40%, respectively, and would not affect the present flow of traffic.

Intersection traffic counts and predicted volumes with the project are shown in Appendix B, pages 123-127. Intersection analysis indicates that all four project intersections would remain at Level of Service A. The Level of Service on the westbound 23rd St. approach to the Potrero Ave. intersection, 4 blocks east of the site, is B at the p.m. peak hour. This would not change with the project. As the free flow of vehicular traffic around the project would not be affected, no impacts on freedom of bus movements would be expected.

TABLE 7: AVERAGE WEEKDAY VEHICULAR TRIP GENERATION

<u>Type of Trip</u>	<u>Purpose of Trip</u>	<u>Total Trips</u>
Residential		
Auto	Work	170
Auto	Shopping	70
Auto	Other	100
Total Residential		340 ¹
Commercial		
8,500 square feet		370 ²
Commercial and Residential Delivery Service		30
Total All Trips		<u>740</u>

Note: All numbers rounded off.

¹ 2.6 vehicle trips per unit.

² 44 vehicle trips per 1,000 square feet.

Source: Richard K. Hopper, P.E., Consulting Engineer

The project would generate 40 pedestrian trips during the project peak hour. If all these pedestrians were to be at the most crowded section of the sidewalk, the pedestrian count would rise from 1.3 to 2.0 per minute, with no change from the present Pedestrian Level of Service A. Pedestrians were counted as they passed a fixed observer on the sidewalk.

Field investigation⁴ indicates that buses in the project vicinity could accommodate the approximately 50 transit trips (15% of daily total) the project would generate during the peak hour. Assuming that all passengers would be evenly distributed by bus route, approximately 5 passengers (50 divided by 5 bus stops for each of the 2 routes, 19-Polk and 35-Eureka) would board or depart a bus at any single stop during the peak hour. Buses on both routes run every 10-12 minutes at peak hours. The average increase in passenger load per bus would be about 1 per stop, or a maximum of 5 for the project. Passengers going downtown may be transferring to other lines which may not have available capacity.

The existing vehicle access points on Kansas and 24th Sts. would be maintained and additional access would be added from Rhode Island, to 6 parking spaces, and access from 23rd St., to 16 parking spaces. The 24th St. entrance would lead to 77 parking spaces and the entrance on Kansas St. would lead to 62 spaces. Access to the largest parking area is from 24th St. where there is no MUNI line. During rush hour, cars entering and exiting on Kansas St. could interact with buses. The smaller parking areas accessed from 23rd and Rhode Island Sts. would have fewer such interactions.

The 132 dwelling units would require 132 off-street parking spaces and, as the Planning Code requires 1 space per 500 square feet of commercial space, 17 spaces would be required for 8,500 square feet of commercial space. Thus, the Planning Code would require 149 parking spaces. The project would provide 161 parking spaces, 12 more than required.

For planning purposes, the San Francisco Department of City Planning uses 0.78 vehicles per household.⁵ At this rate, the 132 residential units would generate a need for 103 off-street parking spaces. The Manager of Victoria Mews estimates parking space use at that project at 1.3 spaces per unit.⁶ If this rate were to apply for the new project, 132 units would generate a need for 173 spaces.

A maximum of 40 vehicles would need parking spaces during the peak hour of patronage of the commercial space. As the average duration of neighborhood commercial parking is 1/2 hour, a demand of approximately 20 parking spaces would be created by the commercial space during the peak patronage hour. Ten spaces would be needed by employees driving to work in the commercial space. The other employees would walk or use public transit.

The total demand from residents, shoppers and employees would be between 133 and 203, or from 28 less to 42 more than would be provided in the proposed project. A maximum use of one space per unit is considered reasonable by the Department of City Planning.⁷ This would result in a total demand for 162 spaces, or 1 more than provided.

The parking demand from neighboring uses is 32 at peak hour, which would leave 32 of the 64 parking spaces on streets bounding the project for extra project-related parking. If the worst case demand for 42-off-site spaces should occur, this would be 22 less than spaces available on streets bounding the project. As there is existing neighborhood demand for 32 spaces, 10 project-related or neighborhood cars would have to park further from the project. Space would be expected to be available within one block of the site.

The proposed development would replace 4 curb cuts with 5 curb cuts. Some of the new curb cuts would be narrower than the old curb cuts so that one additional street parking space could be provided. No off-street loading space for deliveries would be provided; none is required by the Planning Code.⁸

Notes: Transportation

1. This differs from the assumption of 10% of total traffic during the peak hour because it is derived for a specified project rather than for the total traffic on the street.
2. Based on 4 February 1981 counts previously cited.
3. Assumption by traffic consultant, Richard K. Hopper, P.E.
4. By traffic consultant, Richard K. Hopper, on 3, 7 and 15 July 1980 and by EIR consultant, Ted Kreines, AICP, on 4 February 1981.
5. Ed Green, San Francisco Planning Department, telephone conversation, 3 July 1980 and Chi-Hsin Shao, San Francisco Planning Department, telephone conversation, 2 September 1980, and Department of City Planning memorandum from Dave Feltham through Alan Lubliner, Project Manager, Center City Circulation Program, to Dean Macris, Director of Planning, 10 March 1981, "The latest available census data (1970) shows that auto availability per household in San Francisco is only 0.777. . . Autos available rates are generally higher than auto ownership rates."
6. Bob Turner, telephone conversation, 23 March 1981.
7. Alan Lubliner, telephone conversation, 23 March 1981.
8. See Sections 152 and 153.

F. Noise Impacts

1. Construction Noise

During demolition and construction of the proposed project, construction equipment noise would be expected to temporarily increase noise levels in the project vicinity. Project sponsors (conversation with developer, 21 July 1980) have estimated demolition time at 2 to 3 months, and construction and rehabilitation at approximately 18 months. The demolition methodology has not been determined. Whether wrecking ball or cranes are used during demolition, the peak sound level generated by these construction activities would occasionally reach 90-95 dBA outside residences on 23rd St. between Kansas and Rhode Island Sts., on Rhode Island St. between 23rd and 24th Sts., and on 24th St. between Kansas and Rhode Island Sts. Typically, noise levels during this phase would range from 60-85 dBA. This sound level would be about the same as existing traffic noise levels. The project haul truck route is not known, but it would probably be along Kansas Street south to 26th Street to Army Street and then to Highway 101 south.¹ Construction would be subject to the San Francisco Noise Ordinance.² Section 2907 Construction Equipment states,

"It shall be unlawful for any person. . . to operate any powered construction equipment. . . if the operation of such equipment emits noise at a level in excess of 80 dBA when measured at a distance of 100 feet from such equipment. . ."

No pile driving is anticipated during construction; therefore, construction noise levels would not exceed demolition noise levels.

U

2. Traffic Noise

Project-induced traffic would increase surface traffic on 24th St. between Rhode Island and Kansas Sts. by approximately 40%. This would add approximately 3 dBA in traffic noise due to vehicular traffic on 24th St. However, the vehicular traffic noise from the Freeway would exceed the traffic increase due to project-induced traffic on 24th St. between Kansas and Rhode Island Sts. A 3 dBA noise change is usually perceptible; in this case Freeway noise would overshadow the change.

3. Land Use Noise Policy

The Environmental Protection Element of the City's Master Plan³ states regarding residential development in an area with an Ldn of 65 or more:

"New construction or development should generally be discouraged. If new construction or development does proceed a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design."

State Noise Insulation Standards for multi-family housing require that "an acoustical report be prepared showing that the interior noise level due to exterior sources will be less than CNEL 45."⁴

The noise level in the courtyard would be expected to be lower than the present 55 to 60 dBA because Freeway noise comes through the driveway gate and this gap would be eliminated.

Notes: Noise Impacts

1. Assuming that debris would be disposed of south of the site, probably south of the county line.

2. City and County of San Francisco Noise and Abatement Control Ordinance No. 274-72, 4 December 1972.

3. The Plan for Transportation Noise Control, adopted by the San Francisco Planning Commission 19 September 1974 by Resolution 7244. The project site is mapped in this report as being in an area with a background noise level of over 65 dBA.

4. Charles M. Salter, 2222 Limited EIR Acoustical Report, 28 August 1980.

G. Air Quality Impacts

1. Toxic Substances From Past Site Uses

A study of toxic substances on the site shows that any toxicity problems on site would be expected to be dominated by the long history of paint manufacture. Paint manufacture generally involves 2 categories of toxic materials: volatile, organic suspension and drying agents, which evaporate rapidly; and pigments, many of them water-insoluble compounds of metals such as cadmium. Until the 1970's, mercury compounds were widely used as mold inhibitors in paint. (See further discussion of paint chemistry, page 60.)

Many volatile organic substances have noticeable odors, responsible for the characteristic odors of paint. Such odors were not generally conspicuous on the site at the time of the first site visits in May and June, 1980. Later, after paint was spilled and sprayed by vandals, paint odors became more prominent, but were presumably not associated with past spills on the site.

A variety of organic materials may be present in the air over the site as a result of evaporation of non-odorous or slowly evaporating materials in unsealed containers on the site. (See Appendix C, pages 129-136, for a list of substances found on site.) Project sponsor has removed all toxic materials from the site and disposed of them in accordance with Title 22, Division 4, of the California Administrative Code, Environmental Health. Any remaining material in the air due to these stored materials should have dissipated in a few days after their removal and would be expected to drop below detectable air concentrations by the time construction begins. (The detectable level for some organics is now in the parts per trillion range.)

One soil sample taken from the area of the site with intermittently detectable organic odors was analyzed for the presence of polychlorinated biphenyls (PCBs) which are sometimes used in paints. None were found.

Leaking electrical capacitors were observed on the site by inspectors from the California Department of Health Services. The leaking material was identified as Aroclor 1254, a commercial PCB product.¹

2. Toxic Substances From Demolition

It is probable that some toxic material is contained in dust and deposits on interior surfaces of some of the buildings to be demolished.

Material on the walls of one of the buildings south of the incinerator contains 60% asbestos.² This friable³ asbestos material would present an inhalation hazard to demolition workers and persons in the neighborhood at the time of demolition. Asbestos inhalation is associated with lung and other cancers.

There is friable material, which looks as if it contains asbestos, on the ceiling and walls of parts of the building to be retained at Kansas and 24th Streets.

The 240 volt transformer in the building south of the incinerator is a dry transformer and so contains no PCBs. Other transformers on the site would need to be checked before demolition for possible PCB content, to avoid dispersal during demolition.

3. Cumulative Airborne Lead Exposure

Regulation 11 of the Bay Area Air Quality Management District (BAAQMD) provides for a ground level lead emission maximum of 0.001 mg/m³. The Federal lead standard is 0.0015 mg/m³ (24 hour average).⁴ There is evidence that lead accumulates in lung tissue when ambient concentrations are greater than 0.0013 mg/m³.

Downtown San Francisco and San Jose have the highest lead levels in the Bay Area (see Table 8).⁵ In the period 1974-1978, the San Francisco monthly average exceeded the federal 0.0015 mg/m³ standard for 21 months. The Potrero measuring station at 900 23rd Street, closer to the project site, exceeded this standard for 2 months in the same 4-year period.⁵

TABLE 8. SAN FRANCISCO QUARTERLY AIR LEAD CONCENTRATIONS
IN MILLIGRAMS PER CUBIC METER, MG/M³

Year	939 Ellis Street Monitoring Station				900 23rd Street, Potrero Monitoring Station			
	JFM*	AMJ	JAS	OND	JFM	AMJ	JAS	OND
1976**	0.00180	0.00185	0.00175	0.00280	0.00082	0.00084	0.00082	0.00195
1977**	0.00183	0.00100	0.00108	0.00139	0.00108	0.00066	0.00068	0.00103
1978**	0.00097	0.00095	0.00199	0.00108	0.00086	0.00051	0.00083	0.00089
1979***	0.00090	0.00054	0.00059	0.00095	0.00079	0.00050	0.00033	0.00046

* JFM = January, February, March, etc.

** Data from Information Bulletin 4-4-79, BAAQMD, 1979.

*** Data from CA Air Quality Data-Summary of 1979 Gaseous and Particulate Pollutants; Teresa Lee, Public Information, BAAQMD, phone conversation 12 August 1980.

Because of the proximity of the site to the Freeway, it is possible that lead in air due to exhaust from cars using leaded gasoline and lead in the air from lead pigments used in paint could cumulatively exceed this standard even if the lead from either source alone were at a relatively safe level. The prevailing winds from the northeast tend to bring Freeway-associated air pollutants over the site. In order to ascertain whether a lead problem exists at the site, on 1 July 1980 air was sampled at 3 locations on the site: the Freeway side, the courtyard, and the side away from the Freeway. Analytic results indicate that lead concentration in all 3 samples was greater than or equal to 0.0012 mg/m³.⁶ The probable error of these measurements was of the order of $\pm 25\%$, so it can be said that the values were probably all within the federal standard but it is not certain that they were below the BAAQMD standard.

Under the relatively infrequent conditions of east wind, there is a possibility that emissions from the Potrero Power Plant could pass over the site. Trace element concentrations from this source have been estimated at 0.000001 mg/m³.⁷

4. Carbon Monoxide

Carbon monoxide (CO) is the air pollutant from vehicular exhaust most likely to be a problem in San Francisco. The major source of CO near the project is the James Lick Freeway (Highway 101), which is separated from the proposed project site by an approximately 15-foot strip of eucalyptus trees and by Kansas Street. According to CalTrans, Highway 101 near the proposed project is one of the most heavily travelled freeways in the Bay Area.⁸ This highway carries approximately 220,000 vehicles per day.⁸ As project trips would be less than 1% of the Highway 101 trips, project generated air pollutants would be undetectable against the existing background of emissions from Highway 101. The BAAQMD monitoring station at 900 23rd Street is the closest air monitoring station to the project project. During 1979, the CO standard was exceeded once (compared to twice at the 939 Ellis Street Station). Nitrogen dioxide and sulfur dioxide standards were not violated at either station.⁹

The BAAQMD has recommended that: "... residential development should observe an absolute minimum distance of 50 meters from the roadway edge to habitable areas (including yards) and that an optimum distance for air quality purposes should be 100 meters."¹⁰ The site is about 95 feet (29 meters) from the Freeway, and about 25 feet above the surface level of the Freeway.

5. Sensitive Receptors

Patients who may be particularly susceptible to the effects of inhaling toxic substances could be at San Francisco General Hospital, 1 block from the site, across the Freeway, on the north side of 23rd Street. The prevailing northwest winds would blow from the direction of the hospital toward the site. During winter storms, winds from the south could blow from the site area toward the Hospital. During rain any toxic materials in the air would tend to be washed out of the air. Traffic-associated air effects would be dominated by the Freeway passing along the east side of the Hospital and Potrero Avenue traffic on the west side of the Hospital.

Because of natural factors and the proximity of the Freeway, project-related emissions would probably not have an effect that could be detected at the hospital.¹¹

Notes: Air Quality Impacts

1. Letter from David L. Storm, Ph.D., Regional Administrator, Hazardous Materials Management, Department of Health Services, to Carol Roos, OER, 4 December 1980.
2. Microscopic analysis by Robert MacDonough, S.F. Health Department, 21 July 1980.
3. Friable: easily rubbed, or crumbled into powder.
4. 43 Federal Register 46246-46277.
5. Information Bulletin 4-4-79, Atmospheric Lead in the San Francisco Bay Area, 1970-1978, BAAQMD, 1979, p. 5.
6. Analyses performed by LFE Environmental Analysis Laboratories, Richmond, under contract to Bendix Environmental Research, Inc., EIR subcontractor.
7. "Public Health Impact of Emissions From Potrero Plant," Systems Applications, Inc. report SAI No. EF 79-66 prepared for PG&E, 2 May 1979.
8. John Gersler, CalTrans, telephone conversation, 16 June 1980.
9. Contaminant and Weather Summary, BAAQMD, December, 1979.
10. Milton Feldstein, Air Pollution Control Officer, letter to City of Walnut Creek, 24 March 1980.
11. Traffic counts have a probable error of about 10%. As local traffic near the project would be less than 10% of Freeway traffic, it would not have a statistically detectable air pollution impact.

H. Toxic Substances

1. Paint Chemistry

Paints consist of pigments and a medium in which they are suspended that binds the pigment to the substrate. Varnish is a liquid coating material containing a resin that dries to a hard, usually transparent, film. Though usually clear, varnishes may contain pigments. Lacquer is a varnish that solidifies by evaporation of solvents in it. Pigments may be added to lacquers. Paints, varnishes, and lacquers were all manufactured on the site.

Paint was manufactured on this site since the mid-nineteenth century, first by the Bass-Heuter Paint Company; then from 1930-1932 by Dutch Boy, Inc., and finally by National Lead Company until 1970. National lead has not retained files on this plant.¹ According to a former plant superintendent on this site, paint, stains, lacquers and shellac were manufactured here.²

The most probable residual problem on the site would result from metal-containing pigment contamination of the soil under the concrete that covers most of the site (in some places it is 2 feet thick). This contamination could occur through cracks in the slab. Any organic pigments present would probably be decomposed into harmless compounds by bacteria, fungi and algae in the soil. Metallic compounds used as paint pigments would tend to stay in the soil.

Appendix C, page 137, lists some of the metal compounds used as paint pigments, and gives information on their toxicity. Many paint pigments consist of mixtures; for example, cadmium yellows may contain zinc sulfide in addition to cadmium sulfide.³

During the Synanon organization's tenancy on the site, from 1972 to January of 1980, there was a ceramics workshop on site. Substances used in ceramic glazes include compounds of lead, chromium, copper and cadmium.⁴

2. Soil Analyses

Except for a small area at the southeast corner of the block, the site is totally covered by buildings and concrete pavement. It is not known how long the site has been so covered. In view of the history of over 100 years of paint manufacture on the site, there has been opportunity for soil contamination due to spillage. On the basis of paint and glaze chemistry, 17 soil samples from cores taken by the soil engineer, Warren Wong, and a surface soil sample were analyzed for one or more of the following: arsenic, cadmium, chromium, copper, lead, mercury and zinc. (The probable error of the analytic values is $\pm 5\%$.) The core samples were taken from 1.3 to 20.9 feet below the surface (see Appendix C, page 139 for location and numbering of the core sites), and selected to indicate whether metal levels were present in high enough concentrations to pose a possible hazard to users of the courtyard area. As most of the site is paved, other surface samples will not be accessible until removal of the cement slabs. As it is not known how much new topsoil was brought into the southeast corner of the site for plant nursery operations, analysis of soil in this area has been deferred until the general study to be made after slab removal (see Mitigation, pages 90-91.)

A comparison of normal soil concentrations to the minimum and maximum concentrations found on the site for the 7 elements for which analyses were performed can be seen in Appendix C, page 138. Arsenic was found to be within normal soil limits. Cadmium, copper and mercury are within normal limits for soil, except for the surface sample (see pages 63-64). Zinc, lead and chromium were found to be above normal in samples other than the surface sample. See Appendix C, pages 140-146, for site distribution of these 7 elements.

* Lead. Movement of lead in soil is determined by the type of lead compound, the binding capacity of the soil and the acidity of the soil. Lead can be absorbed by plant roots, the degree of absorption increasing in acidic soils. Therefore, the site should be developed in such a fashion that plant roots would not reach soil with above normal lead content. The lead pigments used in paints are water insoluble, so they would be expected to move slowly through the soil, remaining over long periods. Lead has no known role in normal human physiology, and has known adverse effects ranging from anemia, abdominal pain, low blood pressure, loss of appetite and insomnia to brain effects with convulsions often terminating in death, at high concentrations.⁵

The analytic data suggest that lead entered the soil at the north-central and northeast portions of the site. Slow movement through the soil resulted in decreasing concentrations horizontally toward the south and west sides of the block, the expected direction of ground water movement, and with increasing depth. Most of the lead appears to be within 2 feet of the surface in the area of boring No. 2 and the surface sample. The highest concentration found was 4800 ppm⁶ in the surface sample, 4600 ppm above the normal soil lead range and 4792 ppm above the low value of 5.6 ppm, in Core 1. This sample is thus 800 times the minimum level for the site, and 24 times the maximum normal soil range for lead. Maximum lead concentrations found on this site are in the low range of 1,000 to 100,000 ppm lead values found in Oakland where a lead battery manufacturing site was developed as a public park after removal of the surface soil.⁷

Zinc. Zinc was found in highest concentration on the north side of the site in the surface sample and in Core No. 2; zinc decreases moving west, south and by depth. The highest value, 4200 ppm in the surface sample, was 3950 ppm above the normal soil range and 4192 ppm above the low value of 8 ppm in Core 2 at 10.4 feet. This represents an approximately 350-fold increase over background levels on the site. Zinc distribution on the site is shown in Appendix C, page 146. Trace amounts of zinc are required in the human diet as components of cellular catalysts. Ingestion of excess zinc causes nausea and vomiting which tend to remove the material from the system. Zinc compounds are generally less toxic than lead compounds.⁵

* Chromium. The distribution pattern of chromium on the site differs from that of lead and zinc, the highest concentrations occurring in Core 8 at the southwest corner of the site, and no systematic variation of concentration with depth is evident. The two highest concentrations, 1000 and 900 ppm occurred in boring No. 8, at depths of 9.4 and 20.9 feet, respectively. These 2 samples are the only samples indicated as shale in the preliminary boring logs of the soil engineer. The third highest concentration, 350 ppm at 15 feet in boring No. 4, was the only sample partially composed of serpentine. Chromium is normally associated with serpentine rocks and tends to concentrate in clay.⁸ Those samples identified in the boring log as dominantly clayey ranged in chromium content from 140 to 260 ppm. Those samples identified as dominantly sandy ranged from 25 to 100 ppm chromium. The chromium content of the samples appears to be due to natural soil and rock composition. Residents would not come in contact with the rock under the site and soil concentrations are generally within the normal range for soil. For distribution of chromium on the site, see Appendix C, page 142.

Like zinc, trace amounts of chromium are required in the human diet. Workers in the chromate-producing industry, exposed to chromium levels substantially above those required, have an increased incidence of lung cancer.⁹

* Cadmium. Cadmium was found at 17 ppm in the surface sample taken near the loading dock.

Values in 3 other samples taken at depths of 1.3 to 9.4 feet were all below 1 ppm. The 1.3 foot depth sample was taken approximately 7 feet from the surface sample. Typical soil cadmium concentrations are 0.1 to 7 ppm. The background level at this site is toward the lower end of this range. It appears that cadmium at the project site is probably concentrated near the surface, where it is increased about 20-fold, and has not tended to move down into the soil. For cadmium distribution on the site, see Appendix C, page 141. Cadmium affects kidney function. Increased cadmium consumption should be avoided because many Americans are already close to the level of cadmium intake that can produce symptoms. The soil containing excess cadmium would be removed by the mitigation measure discussed on pages 90-91.

* Copper. Copper was 160 ppm in the surface sample, not significantly different from 150 ppm, the top of the range of normal soil concentrations. Three other samples at depths of 1.3 to 9.4 feet ranged from 8 ppm at 9.4 feet to 79 ppm at 1.3 feet. The background level at the site is about 8 to 10 ppm copper, so copper is increased about 16-fold at the surface. A value of 79 ppm at 1.3 feet, Bore 2, suggests that copper has moved further down than cadmium but not far enough to increase concentrations on the entire area under the site. For copper distribution on the site, see Appendix C, page 143.

Mercury. Mercury was 8.6 ppm in the surface sample. The analytic method used did not distinguish between different chemical compounds containing mercury. Average soil mercury concentrations are 0.1 ppm; normal soils range up to 0.4 ppm. The background at the site is about 0.13 ppm. The surface sample is increased about 65-fold over background at the site. Three samples at depths of 1.3 to 9.4 feet ranged from 0.12 to 0.35 ppm. For site distribution of mercury, see Appendix C, page 145. Potentially hazardous mercury-bearing soil would be removed by the mitigation measure discussed on pages 90-91.

Arsenic. Arsenic values on the site were all within normal soil values. The highest value, 60 ppm, was obtained in boring No. 4 at 14 feet, in the sample containing some serpentine, suggesting that it may be associated with the natural content of the sample. The values of 11 and 13 ppm at boring No. 2 and the lack of correlation of concentration with sample depth suggest that arsenic was not spilled in the area where lead and zinc have the highest values and the arsenic may all be of natural origin.

3. Groundwater Quality

Groundwater under San Francisco is part of an aquifer extending under San Mateo County. Some communities in San Mateo County derive part of their drinking water from wells; therefore, it is theoretically possible for ground water contamination in San Francisco to affect San Mateo County drinking water.

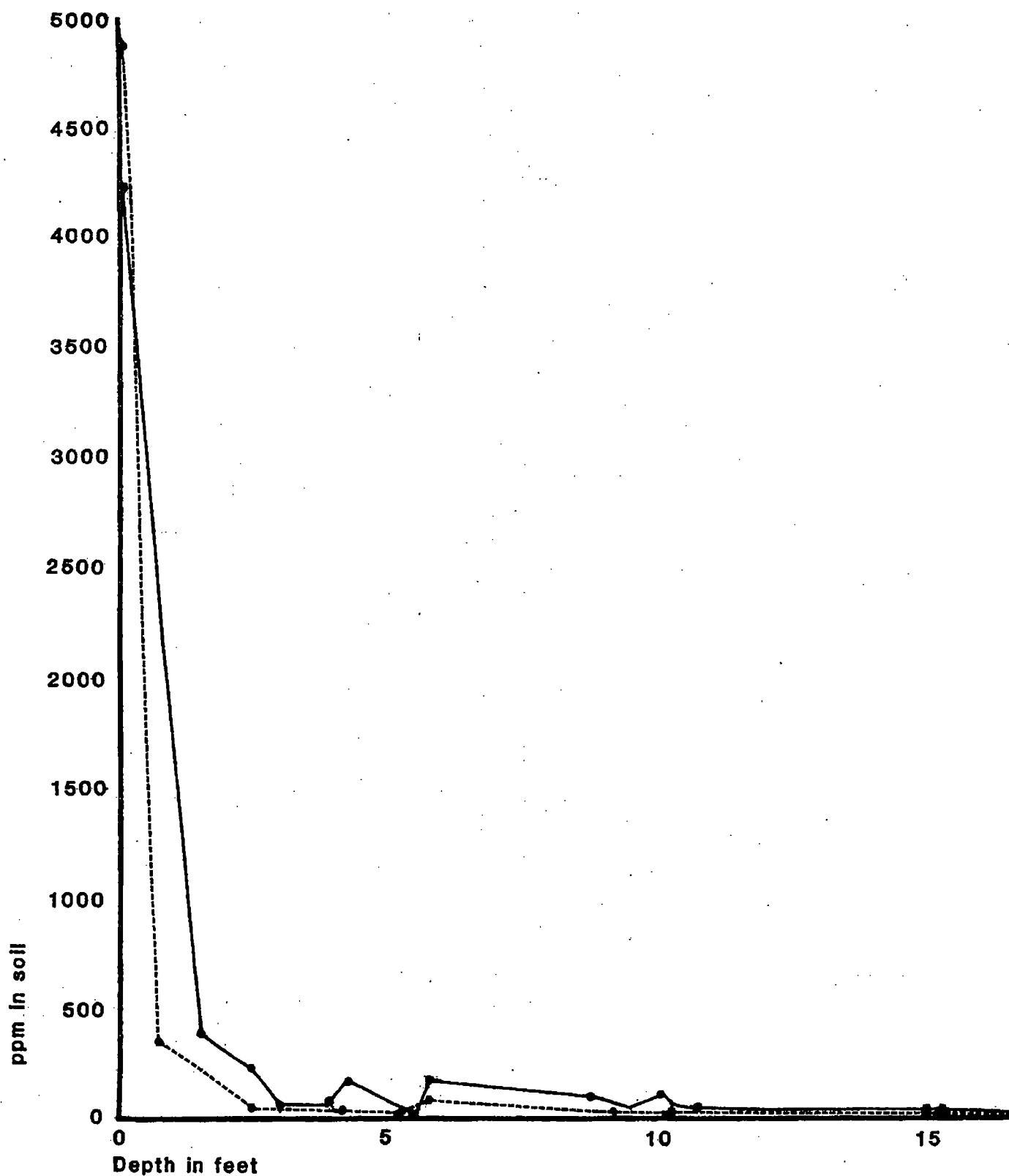
Exhibit 22, page 66, shows that lead and zinc concentrations on the site drop off rapidly with depth. At depths from 5 to 15 feet, zinc concentrations are from 19 to 120 ppm, compared to a normal soil range of up to 250 ppm (Appendix C, page 138). Groundwater would be expected to be moving west toward and under the Freeway. There is no indication from available data that zinc spilled on site is moving off-site in concentrations likely to exceed 250 ppm. Some zinc is probably moving off-site near borings 7 and 9 (Appendix C, page 146). As these amounts are below 250 ppm and zinc concentrations tend to decrease with depth (Exhibit 22, page 66), it appears improbable that zinc from this site would move far enough to reach the San Mateo County line.

Lead concentrations at 5 to 15 feet depth are 6 to 80 ppm (Appendix C, page 144), compared to a normal soil range of 1 to 200 ppm. As lead has moved less through the soil than zinc, the potential for groundwater contamination is less than that for zinc.

As indicated by Appendix C, page 140, arsenic on site is within the normal range; cadmium is above normal in the surface sample and at the low end of normal at other sampling sites (Appendix C, page 141); copper is borderline high in the surface sample and within the normal range at other sampling locations (Appendix C, page 143); and mercury is elevated at the surface sample site, at the top of the normal range at 1.3 feet in boring 2, and at typical soil concentrations at borings 4 and 8 (Appendix C, page 145). These elements are all either natural in the soil or confined to localized surface-contaminated areas. If the site is developed by the sponsor, surface-contaminated soil would be removed. This would be expected to eliminate potential future risk of ground water contamination.

4. Incinerator/Chimney

On the Rhode Island Street site frontage there is a brick incinerator which project sponsor would retain for visual and



Relationship of Zinc & Lead Concentrations to Depth

---◆--- Lead
—●— Zinc

historic interest. The incinerator extends 20 feet above the sidewalk, 30 feet above the paved surface to the south of the incinerator, and 35 feet above its base in the building. The inside of the incinerator is coated with a black residue which is peeling in some places. Because of the potential for carcinogenic substances in such incinerator residues, and the potential for people to come in contact with this material (the incinerator is big enough to stand in -- the base is 9'4" x 8' -- and presently easily accessible from inside the buildings on the east side of the property), this material was analyzed for polyaromatic hydrocarbons (PAH) which were judged to be expected by toxicological consultant, Selina Bendix, Ph.D.

Analytic results on a single sample¹⁰ indicate the presence of 400 ppm \pm 10% PAH. The PAHs considered most hazardous by NIOSH (National Institute for Occupational Safety and Health), benzo-alpha-pyrene, benzoepsilon-pyrene, pyrene, chrysene and anthracene, were not detectable. In the presence of so many other PAHs, 20-25 ppm of any of these 5 substances would have to be present to be detectable. These 5 PAHs are carcinogenic and at least 80 carcinogenic derivatives of these 5 compounds are known.¹¹ Benzo-alpha-pyrene is also teratogenic.¹² In view of the large number of PAHs found to be carcinogenic, it is prudent to consider all of the 400 ppm of PAHs to be carcinogenic.

5. Waste Disposal

Various chemicals related to activity on the site remained at the time of initiation of this EIR in June 1980. A list of these materials is given in Appendix C, page 129. The following materials on this list appear on the state Hazardous Waste List:¹³ phosphoric acid, hydroacetic acid, methylene chloride, gasoline, ammonium nitrate, isobutanol, styrene and hydrochloric acid. The removal and disposition of these, and possibly some of the other materials on the site, is subject to the hazardous waste handling regulations in Title 22, Division 4, of

the California Administrative Code and Chapter 615 of the California Health and Safety Code. The Federal Environmental Protection Agency has designated wastes from paint manufacturing as hazardous wastes under the Resource Conservation and Recovery Act of 1976. This action was taken because of the presence of chromium, lead, mercury, nickel, antimony, cadmium, silver and various toxic organic chemicals in paint wastes.

Materials on the site classified as hazardous must be disposed of at a special hazardous waste disposal site. The Regional Water Quality Control Board has identified 5 sites in the Bay Area as hazardous waste, or Class I, disposal sites. These sites are in the industrialized area along the east side of San Pablo Bay and in northern Contra Costa County. None of these sites accepts materials in drums, as found on this site. The developer contracted with Zero Waste, Inc. to remove these materials in conformance with applicable regulations. Field check by the EIR consultant on 25 November 1980 indicated that most of the containers of chemicals on the site had been removed. Five 55 gallon drums labelled "Chicago Candy Co." remain. Nontoxic reusable materials from the site, remaining from the Synanon organization, have been given by project sponsor to local nonprofit organizations.

Many chemical waste disposal sites have proven to have drums of chemicals below the surface. In the absence of information about past waste disposal practices at the site, it is possible that subsurface storage tanks or other disposal exist on the site.

Along the east side of the block, under the sidewalk, there are a number of tanks. Toward the northern end of the block there are 5 metal storage tanks of 4.8 feet diameter, with manhole frames and covers in the sidewalk, spaced approximately 22 feet apart (center to center). Associated with these tanks are five 2 x 2 ft. metal covers in the sidewalk over inlet valves that connect to the subsidewalk tanks as well as pipes going through the retaining walls. The equipment these pipes connected to has been removed.

These 5 tanks were installed in 1946 pursuant to a Fire Department permit. The permit lists the contents as mineral spirits with a flash point¹⁴ of 115°F. and tank size as 11,100 gallons. The Fire Department requires that any subsurface tank abandoned for more than 6 months either be removed or filled with sand and rendered inert. Ken Long, Fire Department Fire Protection Engineer,¹⁵ recommends that these tanks be removed. It is likely that these tanks are now empty; however, there is a possibility of a fire hazard if vapors remain.

Further south there are more metal covers in the sidewalk and patches of newer concrete which may indicate former plate locations. Those plates that are moveable have valves under them. It seems probable that at least some of these valves still have tanks under them. It is not known whether these tanks are empty or what their past or present contents may be.

On the east side of the courtyard are two valves, labelled "gas fill cap" on the surveyor's map,¹⁶ which may be inlets for a gasoline storage tank(s).

The valves to all the tanks are rusty and could not be moved.

Notes: Toxic Substances

1. Samuel R. Wilson, Director of Distribution, Coating Group, Dutch Boy, Inc., letter received 17 July 1980.
2. Richard J. Marklin, Pioneer City, California, telephone conversation of 17 July 1980.
3. Cadmium lithopone pigments contain cadmium sulfide and barium sulfide; cadmium sulfo-selenides are mixtures of cadmium sulfide, cadmium selenide and selenium sulfide; and the mercadium pigments contain mercuric sulfide and cadmium sulfide. National Toxicology Program, First Annual Report on Carcinogens, July 1980, Vol. II, p. 77.
4. For a brief discussion of ceramic chemistry, see Demo, Allan A., "Chemistry for Potters, J. Chemical Education," 57:72-275, 1980.

5. NIOSH/OSHA Pocket Guide to Chemical Hazards, USDHEW and US Dept. of Labor, 1978, p. 118; Sax, N. Irving, Dangerous Properties of Industrial Materials, 5th Ed, Van Nostrand, 1979, pp. 766 et seq.
6. Another portion of this sample, analyzed by a different method, gave 5200 ppm.
7. Wesolowski, Jerome J. et al., "The Identification and Elimination of a Potential Lead Hazard in an Urban Park," Archives of Environmental Health, 34:413-418 (1979).
8. United States Mineral Resources, Geological Survey Professional Paper 820, 1973, p. 112.
9. National Toxicology Program, First Annual Report on Carcinogens, July 1980, Vol. 1, p. 22.
10. Analysis performed by LFE Corporation.
11. Listed in NIOSH Registry of Toxic Effects of Chemical Substances, 1978.
12. Teratogenic = causing birth defects.
13. California Administrative Code, Title 22, Division 4, Chapter 30, Section 66680.
14. Flash point = the lowest temperature at which vapors from a volatile liquid will ignite momentarily when a small flame is applied under specified test conditions; an indication of degree of fire hazard (the higher the flash point, the lower the hazard).
15. Telephone conversation, 25 November 1980.
16. Exhibit 3, page 6; larger scale drawing available for public review at the Department of City Planning, 45 Hyde Street, Room 319.

I. Energy

1. Building Materials

The energy consumed for heating, hot water, lighting, etc. during the lifetime operation of buildings is greater than the energy required to make building materials, transport them to the site and construct a building. The energy required for building materials is not negligible, however, as can be seen from the following list. The use of aluminum and copper increases the energy intensiveness of construction.

TABLE 9: ENERGY INTENSIVENESS OF TYPICAL BUILDING MATERIALS

<u>Material</u>	<u>Energy to Fabricate</u>	
	<u>BTU* per lb.</u>	<u>BTU* per unit</u>
Aluminum	41,000	
Ceiling materials	1,500	
Concrete	400	
Concrete blocks (8"x8"x16")		15,200/block
Copper	40,000	
Drywall	2,200	
Glass	12,600	
Paint	4,100	
Roofing		6,900/sq. ft.
Steel	13,800	
Vinyl tile	8,000	

* BTU = British Thermal Unit; a standard unit for measuring heat, about equal to that from burning one standard wooden kitchen match. Technically, it is the quantity of heat required to raise the temperature of one pound of water 1° Fahrenheit at sea level.

Source: Kegel, Robert A., "The Energy Intensity of Building Materials," Heating/Piping/Air Conditioning, June 1975, pp. 37-41.

Construction energy consumption for the proposed project is estimated to be the equivalent of 11 million kilowatt hours (kwh) of electricity, based on an estimated energy consumption of 9.3 million kwh per \$10 million of construction cost.¹ The estimated construction cost for the proposed project is approximately \$11.8 million

2. Operating Energy Consumption

If natural gas is used for heating hot water, cooking and space heating, each unit would use about 100 therms (10 million BTU) of gas per month and 300 kwh of electricity per month, or about 13,000 therms of gas and 40,000 kwh of electricity per month for 132 units.

If electricity is used for other purposes, approximately 3 times as much fossil fuel would be used as in the direct burning of natural gas. Use of electricity for heating hot water and space heating would increase electrical consumption to about 1,000 kwh/mo./unit, or 137,000 kwh/ no. for the whole project, and would decrease gas consumption to 25-40 therms/mo./unit, or 3,400 - 5,500 therms/ mo. for the project.² Electrical space heating and cooking would be approximately 2.7 times as expensive as gas. Assuming that electricity would not be used for space heating, the connected load would be approximately 300 kilowatts.

Assuming use of gas for water and space heating and for cooking, electricity would be mainly used for lighting. Peaks would be expected in the morning, while people were getting ready to go to school and work, and in the evening, between 5 and 11 p.m., when all members of the household would tend to be home using appliances and lights. The evening peak would tend to be larger than the morning peak. Electrical energy use would peak during the short days of winter, when lights would be on longer, and would be lowest during the long days of summer.

Natural gas load distribution curves would be similar to those projected for Ocean Beach Park Estates, a larger combined

residential-commercial project.³ The summer minimum would occur in the middle of the day when people would be least likely to be home and the winter minimum would occur in the afternoon, the warmest part of the day. The winter maximum would occur in the morning due to space-heating to day temperatures. Gas consumption would peak in the months of December and January, when the most heating would be required, and would be at a minimum in September and October which are usually the warmest months in San Francisco.

3. Energy Conservation

Air Quality. The more carefully a building is constructed, with attention paid to be fit of windows and doors, the smaller the exchange of air through cracks and the lower the level of energy requirements for heating and cooling, if any. In order to minimize noise intrusion from freeway traffic, windows on the west side are expected to be double pane glass, which would also decrease heating energy use (see Mitigation Chapter for further discussion of double pane glass).

As building air leakage is reduced, exposure of occupants to gases given off by building materials increases. This is of particular concern in the cases of radon and formaldehyde. Radon is a radioactive gas naturally given off in varying amounts by all building materials. Radon concentrations increase detectably in buildings with ventilation rates below 0.3 air changes per hour.⁴ Detailed information on the potential hazard of increased radon exposure in energy-efficient buildings is not available. This matter is being investigated by the Federal Department of Energy (DOE). Current belief is that "routine" measures to increase energy efficiency are not increasing radon exposure enough to have a detectable effect.

Formaldehyde is a carcinogenic substance used in the manufacture of resins, wall board, and insulation. Part of the formaldehyde remains unreacted when these materials are made and

slowly diffuses out of the materials. In relatively air-tight homes, the formaldehyde concentration may become high enough to produce irritant effects on the occupants. Formaldehyde is an irritant to the respiratory tract and eyes at 0.01 ppm⁵ and to skin at 0.15 ppm.⁶ The NIOSH recommended standard for occupational exposure to formaldehyde is 1.2 ppm.⁷ The European indoor air standard is about 0.1 ppm. It has been found that energy-efficient buildings, with reduced air infiltration and low ventilation rates of or below 0.3 air changes per hour, exceed the European standard when outdoor formaldehyde concentrations are 0.016 ppm.⁸

Solar Energy. Use of solar energy is under consideration by project sponsor, see page 94. Use of solar energy for heating water would decrease demand for nonrenewable energy sources. Current cost for solar water heaters on single family homes is about \$3,000 per unit installed.⁹ Solar collectors for a recently built San Francisco apartment building with a similar number of units to the proposed project cost about \$120,000 and are expected to provide 60% of the hot water supply.¹⁰ Cost for the proposed project would be expected to be similar.¹¹ Approximately 35-60 square feet of collector per dwelling unit would be required,¹² or 5,000-8,000 square feet for the whole project.

Fuel savings could more than offset the cost of solar panels during the lifetime of the project; the initial costs would become part of the purchase cost of the units. Payback time due to reduced fuel costs would be 5-7 years. Tax benefits for solar installations include tax credits for a portion of system costs and accelerated depreciation.

Solar cells have the advantages of producing electricity and not involving use of heat transfer liquids which can leak. Their disadvantage is expense, partially due to their low efficiency (maximum conversion of 15% of solar energy to electricity). Some solar cells involve the use of cadmium compounds and consequent risk of exposure to a toxic material of the workers who make them. Some firms hope to bring the installed cost from the present

approximately \$10 per watt to \$0.50 per watt by 1990. The Department of Energy has a National Photovoltaic Program aimed at production of low cost, high volume solar cells. Solar cells are not an economically viable option for the proposed project now, but may become cheap enough for retrofit within the next decade.

Wind Energy. Wind power, independent or in combination with solar units is another inexhaustable energy source. In 1977, it was estimated that "the minimum cost of a domestic plant would be about \$2,500 and would supply approximately 1/4 of the energy demand of the entire household. An installation adequate to supply an average household would cost in the vicinity of \$10,000."¹³ A wind speed of at least 10 mph is needed for wind power generation. A 60 to 80 feet tower¹⁴ is required, depending on upwind obstructions. The blades of a 10 kw windmill would have a spread of 30 to 35 feet.¹⁵ A \$20,000 wind generator in an average wind of 10 mph would produce 22,000 kwh/yr. or 4% of the project's annual energy consumption.

Site specific wind speed records of several years' duration are required in order to calculate the potential for wind energy generation at any particular site. Such information is not available for the project site. A wind speed recorder could be placed on the roof of the project, should it be built, in order to obtain information for a future decision on the feasibility of windpower generation on the site. Any future decision on installation of 1 or more windpower generators would also have to take into account windmill noise generation, community response to visual impact of wind generators and the economics of windpower generation.

Notes: Energy

1. City and County of San Francisco, FEIR, Ocean Beach Park Estates, EE 78.178, 30 August 1979, p. 125, adjusted for construction cost inflation.
2. Robert Tucker, Dealer Representative, PG&E, telephone conversation, 19 August 1980.
3. City and County of San Francisco, EE 78.178, FEIR, Figure No. 24, page 127, 30 August 1979.
4. Hollowell, Craig D., et al., "Radon-222 in Energy Efficient Buildings," American Nuclear Soc. Mtg. 11-16 November 1979.
5. California State Energy Resources Conservation and Development Commission, EDIR Residential Insulation Program, 22 February 1978, p. 60.
6. NIOSH Registry of Toxic Effects of Chemical Substances, 1978, p. 587.
7. NIOSH, op. cit.
8. Lin, Chin-I, et al., "Indoor/Outdoor Measurements of Formaldehyde and Total Aldehydes, 178th, Nat'l Mtg. Amer. Chem. Soc., 9-14 September 1979.
9. John Burton, Integral Design, "Low Cost integral Solar Water Heaters," No. Cal. Solar Energy Assn. Newsletter, p. 7, September 1980.
10. Solar Center, San Francisco, telephone conversation, 28 August 1980.
11. Bryan Kiefer, Jones & Kiefer Construction Co., San Francisco, telephone conversation, 28 August 1980.

12. Tim Duane, Intern, PG&E, telephone conversation, 28 August 1980.

13. Senior Seminar, Environmental Studies Group Major, UC Berkeley, "Energy in the Bay Area." June 1977, p. 157.

14. Windmills are not subject to height limits per section 260(b)1(A) of the Planning Code.

15. Neil Holbrook, Power Towers, Inc., Pleasant Hill, telephone conversation of 9 February 1981.

J. Community Services

1. Water and Wastewater

According to the most recent San Francisco Water Department annual report,¹ City-wide residential water consumption is 35.8 million gallons per day (mgd). Assuming a population of 675,000,² this means an average of 55 gallons per day (gpd) per person.

Assuming 2.1 persons per unit, a 132 unit development would consume 15,200 gpd, or 0.0004% of San Francisco's annual residential water consumption. The water supply in the area would be adequate for the project.³

Sewage from the site drains to the Southeast Water Pollution Control Plant (SEWPCP). There are 12 inch diameter collector sewers on the west, north and east sides of the site and a 16 inch sewer on the south side. These sewers drain to a larger sewer in Kansas Street, a few feet west of the collector sewer.⁴ These sewers could accommodate the wastewater from the proposed project.

Wastewater flows are typically 70% of water use.⁵ In San Francisco, where lots tend to be smaller than elsewhere in the Bay Area, and a smaller percentage of water is used for landscape irrigation, the figure is 90%. Expected flow from 132 units would

be 0.90 x 15,200 or 13,700 gpd. The SEWPCP has a capacity of 70 mgd, and receives an average of 22 mgd in dry weather.⁶ The flow from this project would constitute 0.06% of the dry weather flow to the plant.

The effluent from the SEWPCP does not meet applicable standards. Improvements are under construction which will bring the treatment level to secondary treatment and increase the capacity of the plant.⁷ This is one of many projects implementing the San Francisco Wastewater Management Master Plan. Implementation of this entire plan will be required to bring the City into compliance with the Federal Clean Water Act.

2. Fire and Police Services

According to Chief Robert Rose (meeting on 2 July 1980), water supply, hydrant location and fire equipment access are adequate for the proposed project at the proposed site.

Police department records of incidents "in the area of Kansas Street and Rhode Island between 23rd and 24th Streets" are as follows:

TABLE 10: CRIME INCIDENCE IN PROJECT AREA

<u>Type of Crime</u>	<u>1978</u>	<u>1979</u>	<u>1980 to July 1980</u>
Auto Theft or Burglary	10	15	8
Robbery	0	1	2
Residential Burglary	4	1	1
Battery	1	1	0
Petty Theft	0	1	0
Kidnapping	0	1	0

Source: Letter from Officer Robert Baldocci, #441, of 3 July 1980.

Officer Alfred Baldocci of the Potrero Police Station states that, "As you can see from this report, the incidence of crime in the area is minimal and this picture should change for the better with the increase of public activity in the area.... I don't feel at this time that a development of this nature will cause any particular problem for our department's operation."⁸

3. Solid Waste

Assuming 2.5 pounds of solid waste production per person per day,⁹ and 2.1 persons per unit, 132 units would produce about 700 pounds of solid wastes per day or 0.023% of the 1500 tons produced daily by the City as a whole. Household solid wastes produced by the project would be disposed of at the landfill site in Mountain View, Santa Clara County. The capacity of this site is expected to be exhausted by about 1983 and no alternative future method for disposal of San Francisco's solid waste has yet been selected. For a discussion of alternatives under consideration, see the Final EIR for a "Resource Conversion Center, Brisbane/San Francisco, California," City of Brisbane, 1980.¹⁰

4. Schools

Children residing on the site would attend the following schools: Elementary (grades K-5) students would walk 2 blocks to Starr King at 1215 Carolina Street; middle school (grades 6-8) students would walk 4 blocks to Potrero Hill at 655 De Haro; and high school students would go approximately 1-1/2 miles to Mission High at 3750 18th Street. The above school assignments are effective through 30 June 1981.¹¹ The School District as a whole could accommodate students from the proposed project.¹²

Notes: Community Services

1. Report for Fiscal Year 1978-9, San Francisco Water Department, 1979, page 11.
2. Preliminary report on "Population and Housing in the San Francisco Bay Region 1979-1980," First Draft, ABAG, 4 February 1981.
3. Jack Kenck, City Distribution Manager, San Francisco Water Department, telephone conversation, 16 June 1980.
4. Letter from Mervin Francies, Engineering Associate II, San Francisco Wastewater Program, received 3 July 1980.
5. Metcalf & Eddy, Inc., Wastewater Engineering, 2nd Ed., McGraw Hill, 1979, page 21.
6. FEIR, Southeast Treatment Plant Dry-Weather Expansion & Interim Point Discharge, City and County of San Francisco, April 1975, p. IV-1.
7. Secondary treatment is the treatment of wastewater by a biological or physical chemical process, after primary treatment. It provides approximately 90% removal of BOD. BOD = an abbreviation for biochemical oxygen demand, a standard measure of water and wastewater quality.
8. Letter from Officer Robert Baldocci, #441, of 3 July 1980.
9. Solid Waste Generation Factors in California, Technical Information Services, Bulletin #2, California Solid Waste Management Board, 8 July 1974.
10. Available for public review at the Department of City Planning, Office of Environmental Review, 45 Hyde Street, file number EE 79.307/NLA.

11. Edward R. Schulman, Program Manager, School Operations, San Francisco Unified School District, letter received 3 July 1980.

12. Schulman, E.R., telephone conversation, 26 June 1980.

K. Earthquake Effects

Retained Structures. The 5-story building at the corner of Kansas and 24th Streets and the brick facades designated for retention would be examined by a structural engineer, and his/her recommendations would be followed in project design (see Mitigation Chapter, page 95).

Seismic Safety. A site specific geotechnical analysis, as required by the Seismic Safety Element of the General Plan for the City and County of San Francisco, has been made by Warren Wong of Geo/Resources (California License No. CE 25777). Implementation of the foundation recommendations may become a condition for approval by the Planning Commission or the Bureau of Building Inspection.

Retaining Wall. Along the eastern property line there is a 10 to 13 foot tall retaining wall. In the sidewalk area with asphalt paving, east of the retaining wall and south of the auto repair building, there is evidence of subsidence and slippage toward the retaining wall suggesting some instability in this area. Where it can be seen, this retaining wall is of varied design ranging from 4 to 10 inch thick concrete to 12 inch thick wood. It is likely that the wooden sections, at least, do not meet current City building codes. The integrity of the water, sewer, natural gas, electrical and telephone lines under Rhode Island Street is dependent on the structural stability of this retaining wall. Construction is planned up to these walls so that below sidewalk grade portions and foundations of buildings on the east side of the proposed project would depend on the integrity of this retaining wall.

L. Plants

Landscaping in the courtyard would not be visible from the sidewalk. As designed, project buildings would come to the sidewalk, leaving no space for planting. One street tree would be planted for each 20 feet of street frontage (over 60 trees), as required by the Planning Code. Existing shrubs and trees on the east side of Kansas Street would screen much of the view of the Freeway.

M. Short-Term Uses of the Environment vs. the Maintenance of Long-Term Productivity

Development of the project now would commit the site to residential use and would probably constrain future decisions about use of the site for at least 50 years. In view of the current need for housing in San Francisco and the probable long-term nature of this need, it appears reasonable to make a commitment to housing use rather than leave future options open.

If the 1980 increase of 15% in San Francisco construction costs persists in future years, then it will become progressively more difficult to finance housing construction and to find buyers who can afford new housing. If this site is to be committed to a housing development of some type, the sooner this is done, the lower the cost of the completed units and the greater the number of households that could afford them.

The developer wishes to pursue the proposed project at this time because costs for construction and financing of such developments may increase at a faster rate than prospective buyers' incomes.

N. Growth-Inducing Impact

The proposed project would add about 275 residents on the now vacant site. The project would meet existing housing needs rather than attracting new City residents who would otherwise not consider moving into the City.

Most of the new residents would probably be upper middle income persons because only these persons could afford the units. Most of these people would hold their jobs whether new housing was available in San Francisco or not; however, there is increasing evidence that people are reluctant to take jobs in San Francisco because of the difficulty in obtaining housing.¹ The availability of sufficient housing to meet San Francisco demand would probably reverse the current trend to population loss.² This project alone would not have a noticeable effect on San Francisco's population.

Notes: Growth-Inducing Impact

1. Bay Area Council, "Housing, the Bay Area's Challenge of the '80s," December 1980.
2. ABAG, "Population and Housing in the San Francisco Bay Region 1970-1980," First Preliminary Draft, 4 February 1981.

O. Neighborhood Concerns

Neighborhood organizations were contacted regarding the project.¹ These organizations appear to be divided among those who view the project as a stabilizing influence on the neighborhood, those who think the project would increase housing costs in the area and those with environmental concerns.

One view is that the project's housing costs would be too expensive for most current residents of the community² and that most of the units would be too small for the large families who currently live in the area.³ There is concern that if the project is built, housing costs in the community would rise more rapidly than without the project. As housing costs increase it would be more difficult for existing residents to buy or rent housing in the community.⁴ Some feel that low and moderate income housing should be built on this site.⁵ Some think that the neighborhood already has enough low income housing and that government financial assistance for low and moderate income housing should go toward rehabilitation of abandoned units in the housing projects near the site.⁶

Other neighborhood groups feel that the project would lead to reinvestment in and revitalization of the neighborhood⁷ and add people and security to a block subject to vandalism.⁸

There is concern that the project does not include enough open space for project residents,⁹ that the project would be too dense and out of scale with the existing community of mostly two-family units.¹⁰ Groups with environmental concerns think that noise from the James Lick Freeway would create unfavorable living conditions in the project,¹¹ while others are concerned that chemicals from the site's former use for paint manufacturing may be harmful.¹²

Notes: Neighborhood Concerns

1. Potrero Hills League of Active Neighbors (PLAN), discussion with Maria Vermiglio, President: 23 June 1980.

Potrero Hills Community Development Corporation (CDC), discussion with Jim Queen, President and Brian Chekowski, Counsel, 7 July 1980.

Potrero Hills Boosters and Merchants Association (PHB&MA), discussion with Mike Krivit, President, 3 July 1980 and appearance before PHB&MA Board, 29 July 1980.

Potrero Hills Homeowners and Renters Association (PHH&RA), discussion with Joan Tricamo, 3 July 1980.

Potrero Hill Advisory Committee (PHAC), special meeting 8 July 1980.

Contacted by Kreines & Kreines, EIR consultants.

2. PLAN and CDC.

3. PLAN.

4. CDC.

5. CDC.

6. PHB&MA.

7. PHB&MA & PHH&RA.

8. PHB&MA.

9. PHAC.

10. PLAN.

11. PHH&RA

12. PHAC

V. MITIGATION MEASURES

Mitigation measures described below may be part of the project as proposed by the developer or may either be under consideration or rejected by the developer, as noted. Those measures not part of the project could be required as conditions of project approval.

A. Urban Design

Impact. The mass and design of the project would not match surrounding buildings, particularly along Kansas Street.

Mitigation. The developer would consider making changes to the existing plan for the Kansas Street units to bring them into greater conformity with the prevailing character of development on Potrero Hill. The developer would consider continuing the peaked roof design of the rest of the project along Kansas Street, where the proposed structure would otherwise present a solid, unbroken facade. A decision would be made by the developer after consultation with staff of the Department of City Planning, the noise consultant and the project architect, and before completion of construction plans.

The scale of the rehabilitated warehouse building would be mitigated by attention to creation of pedestrian-scale visual interest in the design of the commercial space on the first floor. Placement of bus shelters on sidewalks bounding the project is under consideration. Submission of scale drawings for treatment of the new facades of the warehouse building and of adjacent sidewalk could be required by the Planning Commission as a condition of the Conditional Use Permit. Submission of plans for sign control could also be required.

B. Historic Structures

Impact. Development of the site could result in loss of the visually prominent chimney on Rhode Island which is listed in the Department of City Planning 1976 Architectural Inventory.

Mitigation. Project sponsor would retain the chimney.

C. Housing Cost

Impact. The new housing prices could price some people out of the market for the project.

Mitigation. Remodeling of the building at Kansas and 24th Sts. would lower the cost per unit in the development below the cost of all new construction. More people would be able to afford the units at the lower prices (note that all new market rate housing is relatively expensive).

D. Noise

Impact. Freeway noise could disturb project occupants.

Mitigation. State regulations (Title 25, California Administrative Code) require that window and wall construction provide for noise reduction to mitigate the existing freeway traffic noise impacts on the west side of the project. The interior noise level must be limited to a maximum CNEL of 45 dB. Acoustical analysis of the proposed building will be performed to determine the extent of the noise control that would be necessary. Preliminary calculations indicate that windows in those walls with maximum outdoor noise exposure would require double glazing or laminated acoustical glazing with an STC¹ rating of about 30. The developers have stated that project construction would conform to the Noise Insulation Standards.

The effect of construction noise would be controlled by the provisions of the San Francisco Noise Ordinance². The project sponsor must comply with this ordinance.

In accordance with Section 2908 of the San Francisco Noise Ordinance, no construction would take place between the hours of 8:00 p.m. and 7:00 a.m.³

E. Toxic Substances

Impact. Potentially toxic dust could drift off site during demolition.

Mitigation. In order to avoid dispersion of potentially toxic dust through the neighborhood, Bendix Environmental Research, Inc., toxic materials consultant for this EIR, recommends that continuous water spray be used during demolition to achieve adequate wetting to prevent dust emissions, as required for demolition of buildings containing asbestos by 39 CFR 1910.1001. Project sponsor would consider implementation of this measure. The decision will be made after consultation with the demolition contractor and before commencement of demolition. This could be required by the City Planning Commission as a condition of the Conditional Use Authorization for the PUD.

The late Robert MacDonough, Environmental Health Inspector, San Francisco Department of Public Health, concurred in this recommendation and further recommended that any dusty or friable material be bagged and tied to prevent toxic dust dispersion.⁴ Project sponsor is considering this measure and would decide after talking to the demolition contractor about feasibility and cost and before authorizing demolition.

Demolition of the asbestos-containing building south of the incinerator must comply with Section 1919.1001 of the Occupational Safety and Health Administration's general industry standards, Part 1901, Title 9 of the Code of Federal Regulations, which provides that employees "engaging in the...demolition of pipes, structures, or equipment covered or insulated with asbestos and in the removal or demolition of asbestos insulation or coverings shall be provided with respiratory equipment...and

with special clothing..." The section also provides that when asbestos is removed it must be kept wet "to prevent the emission of airborne fibers." In practice this is usually achieved by use of a water spray during demolition.⁶ Project sponsor would comply with applicable regulations regarding asbestos during site preparation, demolition and remodelling phases of the project.

Impact. Buildings to be retained may have asbestos-containing interior finishes.

Mitigation. Project sponsor would have the buildings to be retained checked. If interior finishes contain more than 1% asbestos, sponsor would have the material sealed or removed during renovation and prior to occupancy. Any removal would be done in a fashion to avoid exposure of workers or future occupants to asbestos containing dust.⁷

Impact. Occupants might breathe lead concentrations detrimental to their health.

Mitigation. The highest risk of lead pollution to project residents would be from the freeway west of the site. This risk would be mitigated by installation of windows that do not open in units along Kansas Street (the west side of the project). These units would have mechanical ventilation systems. The air intake for this ventilation system would be located as far east on the proposed project block and as high up as is feasible. The developer would implement this measure as part of the project.

Impact. The peeling, black, potentially carcinogenic layer inside the incinerator could be a source of human exposure to PAHs (poly-aromatic hydrocarbons); surface soil could be contaminated by PAHs.

Mitigation. Project sponsor would board up access to the incinerator to prevent contact by project residents with hazardous PAH-containing materials. The EIR consultant, Selina Bendix, Ph.D., has recommended 3 safety measures: 1) seal the opening at base of incinerator; 2) seal the top of the chimney; and 3) remove enough metal rungs on the side of the chimney to prevent access and/or injury by and/or to unauthorized persons. Dr. Ephraim Kahn of the California Department of Health Services concurs in these recommendations.⁸

The State Department of Health Services has indicated concern⁵ that the exposed soil in the southeast corner of the site may have been subject to PAH fallout from smoke from the chimney. Before excavation this soil would be tested for PAHs and if any are found, disposition of the soil would be discussed with staff of the Hazardous Materials Section.

Impact. According to the State Department of Health Services,⁵ the upper levels of the building in the northwest corner of the site were used to mix and store dry paint ingredients which could pose a hazard during demolition.

Mitigation. Project sponsors would have the area inspected for residual paint ingredients and, if found, have these materials removed prior to demolition.

Impact. The distribution pattern of high lead and zinc values in soil on the site is not known. Some soil samples have excessive levels of cadmium and mercury. Contact with these soils could be hazardous.

Mitigation. After removal of the existing concrete floor slabs, project sponsor, in consultation with the State Department of Health Services, would have analyses made to determine the distribution of high lead, zinc, cadmium and mercury values on the site, and 1 to 2 feet of top soil in the contaminated area

would be removed and deposited in a hazardous waste dump if necessary.

Measures designed to mitigate lead and zinc exposure would also mitigate cadmium and mercury exposure unless differences in distribution are shown by further soil analysis. The State Department of Health would monitor analyses and advise as to appropriate mitigation measures, which will be followed by project sponsor.

The soil in the depressed area of the concrete floor of the 5 story building could contain toxic materials. This area would be subjected to chemical analysis and would be removed or sealed, if necessary and as appropriate, on the basis of these tests before the area is filled in to make it level with the rest of the basement parking area. Should any toxic material be found on analysis, the Hazardous Waste Section of the State Department of Health would be consulted before decision on disposition.

Impact. The containers of chemicals on the site pose a hazard of fire and poisoning.⁹ The site is not vandal-proof.

Mitigation. The project sponsor has arranged for removal of hazardous substances from the site, in accordance with applicable regulations⁸ and in consultation with the State Department of Health Services.

Impact. Abandoned tanks beneath the sidewalk east of the site may contain hazardous materials.

Mitigation. In order to mitigate potential impact on construction workers, neighbors, and future occupants from toxic chemicals beneath the concrete slabs which now cover most of the site surface, the City Planning Commission or other City agency having approval power for this project would require that:

a) The subsidewalk tanks adjacent to the east side of the property and any other tanks on or adjacent to the site be opened, aired out, and any contents analyzed and disposed of according to applicable laws and regulations after consultation with the State Department of Health. The tanks would then be removed, as recommended by the Fire Department, to eliminate any possibility of hazard to construction workers or future project residents. Such removal would also permit removal of pipes from the tanks penetrating the retaining wall; these pipes would otherwise interfere with work to strengthen or replace the retaining wall. Removal would be done in such manner as not to undermine the street or substreet utilities. The holes left by the tanks would be backfilled in accordance with recommendations of a licensed engineer.

Should it prove to be technically inadvisable to remove the tanks, they would be filled with sand and otherwise rendered inert to the satisfaction of the Fire Department.

and, b) If any subsurface storage containers which appear to contain chemical wastes should be encountered during excavation on the site, construction would be halted pending investigation by the Hazardous Waste Division of the State Dept. of Health Services.

Impact. Electrical equipment containing PCBs is a hazard for persons working on the site.

Mitigation. Project sponsor would require the demolition contractor to check the site for transformers and capacitors containing fluid. The contents would be analyzed for the presence of PCBs. Any PCBs found would be disposed of in accordance with applicable regulations after consultation with the State Dept. of Health Services. All spilled and leaked PCB-containing material would be removed and appropriately disposed of prior to initiation of demolition in affected areas.

F. Energy

Impact. The production of aluminum and copper is energy intensive.

Mitigation. Project sponsor will instruct the project architect to specify materials less energy intensive than aluminum and copper wherever possible.

Impact. Heat gain and loss through windows often determines the heating and cooling needs of a building.

Mitigation. Windows on the west side of the proposed project would be double pane glass which would decrease heat loss from units during colder months. Heating season energy savings from use of double pane glass are given in the following table. Because these windows would not be openable, a mechanical ventilation system would be required. The energy required to operate this ventilation system would partially offset the energy savings from the double pane glass.

TABLE 11: SAN FRANCISCO HEAT LOSS THROUGH SINGLE- AND DOUBLE-GLAZED WINDOWS

<u>Window Orientation</u>	<u>Heat Loss in BTU¹ per sq. ft. per year</u>		<u>Reduction in Heat Transfer</u>
	<u>Single-Pane</u>	<u>Double-Pane</u>	
North	49,600	25,600	24,000
East and West	43,900	23,700	20,200
South	41,700	23,200	18,500

Source: Adapted by Bendix Environmental Research, Inc. from Dublin, Fred S. and Long, Chalmers, G., "Energy Conservation Standards for Building Design, Construction, and Operation." McGraw-Hill, 1978, p. 123.

¹ See definition of BTU on page 71.

Impact. Energy used by the project would deplete nonrenewable resources.

Mitigation. Project sponsor would instruct the project architect to investigate use of solar panels for hot water heating on south facing roof slopes. Any decision on the use of solar collectors would be made on the basis of cost effectiveness prior to detailed roof and plumbing design.

Before making a decision on the use of solar collectors, project sponsor or architect would contact the State Solar Business Office in Sacramento regarding experience with solar design of other multifamily projects or instruct project architect to do so.

If project sponsor should decide not to use solar collectors, he would instruct project architect to consider the following measures:

1. Incorporation of passive design features to minimize summer solar heat gain and maximize winter solar heating.
2. Design of as much of the roof areas as possible, within Planning Code height limits, at an angle appropriate for future solar collector installation.
3. Design of roofs with access for future solar collector installation and maintenance.
4. Design of buildings to take the weight of future solar panels.
5. Specification of plumbing connections appropriate for future solar installation. (As now required in Santa Clara County).¹⁰
6. Provision of space for a solar heat transmission fluid storage tank and controls or installation of same initially. (The collectors, not the tank and controls, are the most expensive portion of a solar installation.)

Impact. Spare heating and cooling use nonrenewable energy sources.

Mitigation. Project design will conform to the California energy insulation standards (Title 24, California Administrative Code) for new buildings. In 1976 it was calculated that the payback period for the required insulation was 7-10 years.¹¹ All hot water pipes will be insulated with a nonasbestos-containing material to reduce heat loss.

Impact. Low ventilation rates designed to reduce energy consumption allow buildup of toxic gases in building air.

Mitigation. Ventilation system(s) for the ventilated portion of the project on Kansas St. would be designed to provide no less than 0.5 air changes per hour so that indoor concentrations of any potentially toxic gaseous materials would be expected to be no greater than levels in older, less airtight, buildings.

Impact. Developments in which users are not individually billed for utilities tend to have higher energy and other resource consumption than those with individual meters.

Mitigation. Project sponsor would consider individual metering of water, gas and electricity for the units. The decision would be made before detailed plumbing plans are completed.

G. Structural Safety

Impact. Structures designated for retention may not be earthquake safe.

Mitigation. The buildings and walls designated for retention, shown on Exhibit No. 3, page 6, were built prior to the existence of present seismic safety provisions in the San Francisco Building Code, and their potential stability in an earthquake is unknown. The Bureau of Building Inspection would require that these walls and the 5-story building be brought into conformity with present Building Code provisions, if necessary.

Impact. Movement of the retaining wall could endanger structures next to the wall, sidewalk safety, and utilities in Rhode Island Street.

Mitigation. Project sponsor would retain a California licensed engineer to examine the retaining wall, consult with the Department of Public Works, and make recommendations regarding strengthening or replacement of the retaining wall, if needed.

Should replacement of any part of the wall be necessary, this would be done with care to maintain the integrity of Rhode Island Street and its subsurface utilities.¹²

The Department of Public Works would review the disposition of the retaining wall, and structural engineers in the Bureau of Building Inspection would review design of buildings against the wall before issuance of building permits.

Notes: Mitigation Measures

1. STC = sound transmission coefficient, the ratio of transmitted to incident sound energy, a means of characterizing the noise insulation characteristics of materials.
2. Charles M. Salter, P.E., 2222 Ltd. EIR Acoustical Report, 28 August 1980.
3. Technically, the Ordinance prohibits activities producing more than 5 dBA above ambient noise levels at the nearest property line. In some cases the Dept. of Public Works issues special permits for night construction. This would be unlikely in a residential area.
4. Telephone conversation with EIR subconsultant Selina Bendix, 30 June 1980.

5. Dr. David J. Storm, Regional Administrator of the Hazardous Materials Management Section of the State Dept. of Health Services, in a letter to the Dept. of City Planning, Office of Environmental Review, dated 4 December 1980.

6. Applicable procedures are in a State Health memo of September 1977, available for public review at the Department's Office of Environmental Review, 45 Hyde Street, Room 319.

7. Applicable regulations are found in Title 8 of the California Administrative Code, BAAQMD regulations and the previously cited OSHA regulations.

8. Chief, Epidemiology Section, telephone conversation with Selina Bendix, 1 August 1980.

9. Drums of possibly hazardous materials and pesticide containers were absent from the site at the time of EIR consultant field check on 25 November 1980.

10. Ordinance Requiring Solar Hot Water Heater for Residential Domestic Use, NS1208, adopted 23 June 1980, effective 1 February 1981. Bob Sturdivant, Senior Planner, Santa Clara County, telephone conversation, 18 February 1981.

11. California Department of Housing and Community Development, Division of Codes and Standards, "Energy Design Manual for Residential Buildings," 19 April 1976, Preface. San Francisco would be expected to be at the long end of this range due to its relatively even temperature compared to the rest of the state. Energy costs have probably increased more rapidly than estimated in 1976, so the payback period would be expected to be less than 10 years.

12. Cormac Brady, Senior Mechanical Engineer, Department of Public Works, has indicated that replacement of the retaining wall would have to be done carefully to avoid damage to sidewalk and street. Telephone conversation with EIR subconsultant, Selina Bendix, of 25 November 1980.

VI. ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED IF THE PROPOSAL IS IMPLEMENTED

A. Land Use

Rezoning would increase the permitted density on the site.

B. Noise

During project demolition and construction phases which are expected to total about 21 months, there would be a temporary increase in noise levels in the project vicinity.

C. Energy

Operation of the proposed 132 dwelling units and 8,500 sq. ft. of commercial space on a site that currently uses no energy would increase consumption of electricity and natural gas by about 14,000 therms of gas per month and 41,000 kwh of electricity per month.

D. Air Quality

The proposed project would be 71 meters closer to the freeway than the distance recommended by the Bay Area Air Quality Management District for residential development.

E. Toxic Substances

Occupants of the proposed project may come in contact with hazardous polyaromatic hydrocarbons which are probably present inside the incinerator (see Mitigation Measures, page 90).

VII. ALTERNATIVES TO THE PROPOSED PROJECT

Three alternatives, in addition to No Project, have been selected for analysis in this EIR.

A. Low Density Alternative

The entire site could be cleared and replaced with dwellings consistent with the existing RH-2 (Residential, House, Two-Family) zoning. Using a mix of 25 by 75 ft. and 25 by 100 ft. lots, it would be possible to divide the 200 by 400 ft. site into 36 lots. Under the Planning Code RH-2 maximum of 1 unit per 1500 sq. ft. with a Conditional Use Permit, 53 units could be built on the site. With 36 lots this would give a mix of 17 duplexes and 19 single-family residences. With a PUD and Conditional Use, 53 units could be built with common open space. (See Exhibit 23, page 100.) The units could probably have 2 or 3 bedrooms.

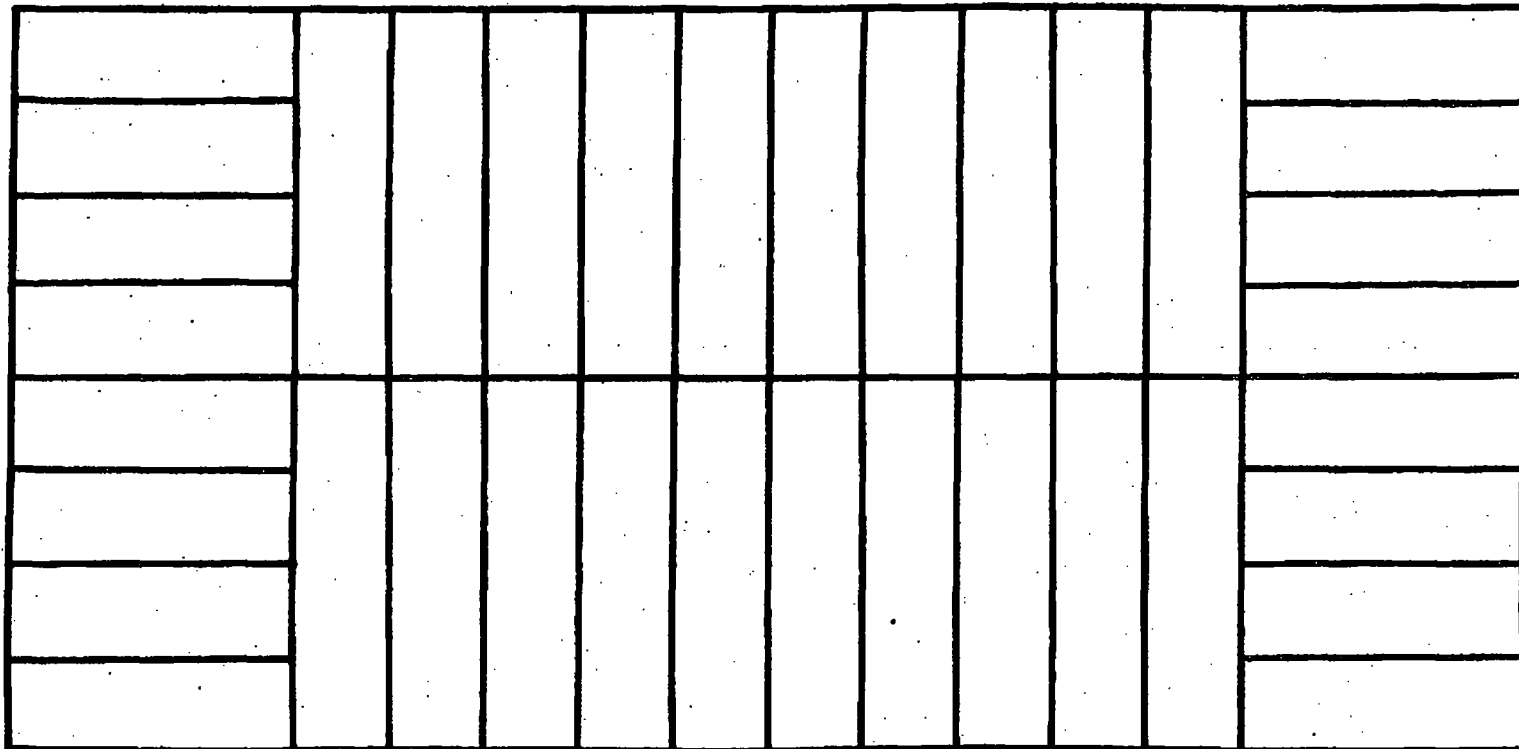
The sale price of the units would have to be higher than for the proposed project, because there would be fewer units requiring a greater yield per unit for a positive return on the sponsors' investment. These units would not reflect the reduction in cost per unit from rehabilitation of the two structures retained in the proposed project.

While it would maintain the neighborhood character, this alternative would create fewer housing opportunities for ownership for area residents, because the smaller number of units would be higher priced and would not provide the range of household sizes of the proposed project.

Alternative A would comply more closely with Objective 2, Policy 1, of the Residential Element of the Master Plan than the proposed project, because the RH-2 density would be closer to that of the surrounding development. It would not meet Objective 4, "Minimize hardships caused by the increased cost of housing," because the units would be more expensive than those in the proposed project.

Kansas Street

24th Street
100



23rd Street

Rhode Island Street

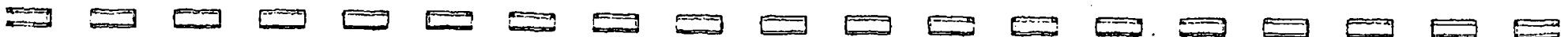
Low Density Alternative

— Possible lot layout

0 25'



Exhibit No. 23



Alternative A would have smaller traffic impacts than the proposed project because it would generate fewer trips. This alternative would have greater parking impacts due to reduction of on-street parking spaces because of driveway curbcuts. Per unit parking demands would be greater for Alternative A because the owners of more expensive units would have more cars.

The energy consumption, water consumption, and solid waste production would be on the high side of 40% of that due to the proposed project as use would be slightly more than a straight percentage of the number of units because of 1) the larger average unit size and 2) the higher economic level of the occupants.

Removal of the chimney as an architectural reference point would eliminate an architectural resource and possibly expose construction workers and neighbors to the chemical compounds inside the chimney during demolition. Other waste disposal and potential toxicity problems would be similar to those anticipated for the proposed project.

This alternative was rejected because it would not be profitable to the project sponsor.

Subalternatives. If a duplex were to be placed on each lot, 72 units could be built. Units on the 25 x 75 ft. lots would tend to be small, probably with one bedroom. Energy consumption, water consumption, and solid waste production would be about 55% of that of the project. This subalternative was rejected for the same reason as stated above.

B. High Density Alternative

This alternative would cover the entire site and could be designed with or without commercial space. Units would surround a parking deck, as shown in Exhibit 24, page 103. Swimming and tennis facilities might be located on the roof of the structure. A total of 200 units could be approved for the site if its zoning were reclassified to RM-3 (Residential Mixed District, Medium Density). The Planning Code would require 200 off-street parking spaces.

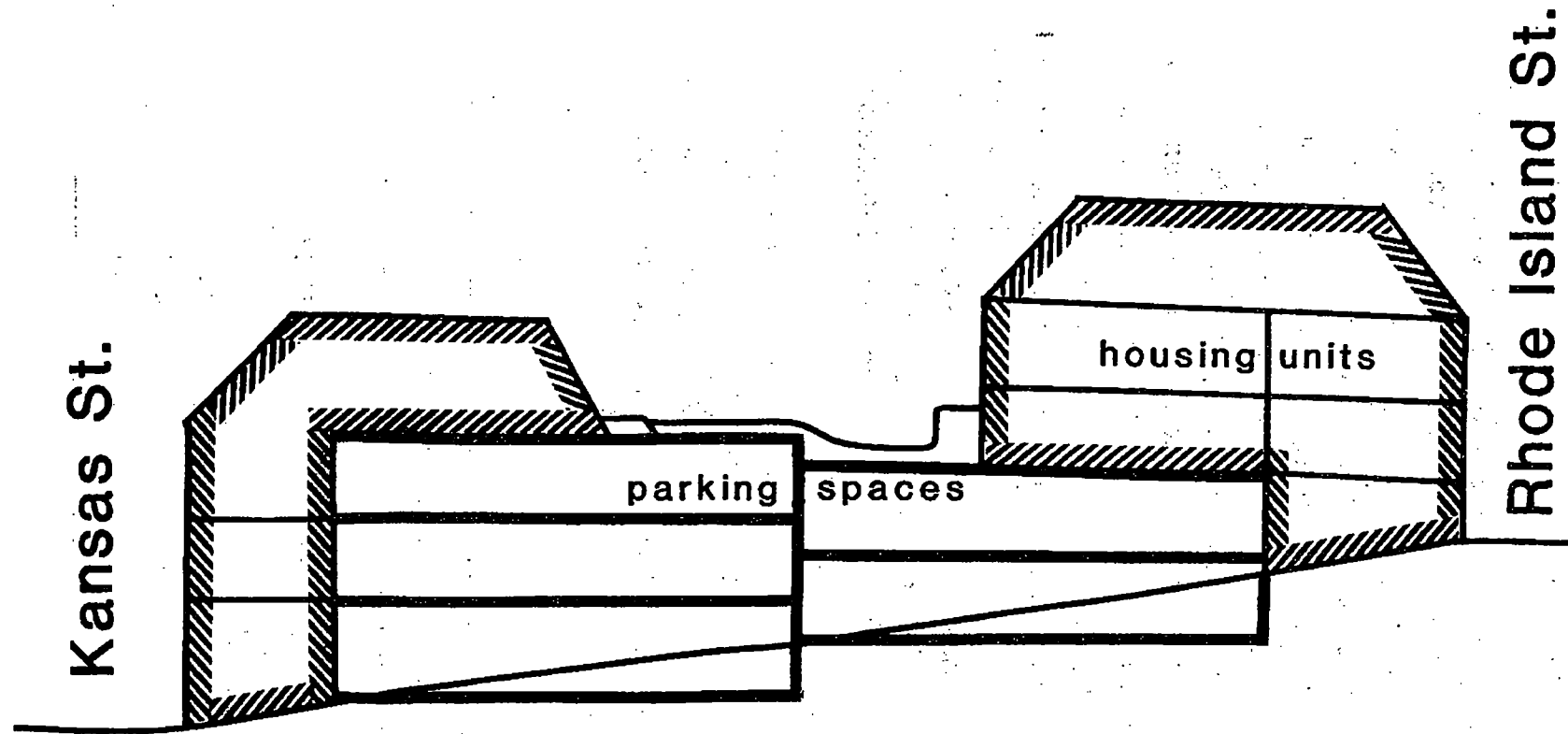
The socioeconomic impacts of this alternative would be the least of any alternative, including the proposed project, because some units could be offered at prices below market rates.

While this alternative would be in greater compliance with Master Plan policies regarding home ownership opportunities and larger-sized units than the other alternatives, the design would not conform to the character of present development in this neighborhood.

If no commercial space were included, this alternative would result in an average 500 weekday vehicular trips, 240 less than the expected 740 with the proposed project. Other impacts associated with such a project (for example, parking, water use and energy consumption) would be increased by about one-half because of the additional 63 units. If the same amount of commercial space as proposed were included, 370 additional trips per day would be expected, for a total of 870 trips. Adding 40 commercial and residential delivery trips would give 910 total trips or 22% more than the proposed project. Parking demand would probably saturate parking on the streets bounding the project.

This alternative was rejected because it would be out of scale with the neighborhood and project sponsor considers that approvals would be more difficult to obtain.

Subalternative. If 20 of the 200 units were to be designed for the elderly, this would decrease required project parking, for this alternative, from 200 spaces to 184 and would probably decrease neighborhood parking impacts. This alternative was discarded for the reasons stated above.



High Density Alternative/Transverse Section

Not to scale

Exhibit No. 24

C. Mixed Housing Types Alternative¹

Alternative C would contain 132 units, evenly divided (44 each) among three types: market-rate units, moderate income units,² and low income³ rental units. This alternative would have the same number of units as the proposed project and would be built on the same site with a similar design. Market rate and moderate income condominiums would be combined with Section 8⁴ subsidized low income rental units owned and operated by the project sponsor or an independent entity created for the purpose.

HUD⁵ Section 8 funds could be used for family housing that contains no more than 20% 1-bedroom units and at least 5% 3-bedroom units. Section 8 is a rent subsidy program under which rent in excess of 25% of a low-income household's monthly income can be paid by HUD. The maximum rent for such units, called the Fair Market Rent (FMR), is given in Table 12, page 104. The proposed project would contain about 32% studios plus 1-bedroom units and 7% 3-bedroom units, so the unit mix would have to be shifted or a disproportionate fraction of the larger units would have to be Section 8 units. If the unit mix were shifted to more 2-bedroom units without changing the design (changing the design would decrease the amount of interior courtyard space), then room size in the units would decrease.

TABLE 12: MAXIMUM HUD FAIR MARKET RENTS

	<u>Elevator (2-4 Stories)</u>	<u>Walk-Up</u>
Studio	\$512	\$461
1-bedroom	612	534
2-bedroom	782	697
3-bedroom	961	849

Before approving a project such as Alternative C, HUD would consider the feasibility of the project, taking into consideration such factors as the number of subsidized units already in the area, the marketability of the project and the possibility of combining rental and sale units.

The 44 units of moderate income housing, to be affordable, could vary in cost depending on the size of the family and where in the 80 to 120% range household income might be. The limit of affordable housing cost for a moderate income household would be about 3 times the annual income, or \$85,000.⁶ In the proposed project some of the 1-bedroom units would be within this range and the rest of the units would be above the price range for moderate income housing.

Assuming that the unit mix were not changed, the 44 Section 8 units would have to be made up of 3 three-bedroom, 33 two-bedroom and 8 one-bedroom units, leaving 13 studios, 21 one-bedroom units, 48 two-bedroom and 6 three-bedroom units to divide between moderate and market rate housing. Further assuming the maximum cost of \$85,000 for all the moderate income units, regardless of size, as a rough estimate the maximum sales income from the market rate and moderate income units would be as shown in Table 13.

Direct sales income would be about half of the income of the proposed alternative, and about 60% of the project development costs.

Assuming that HUD maximum rents would be charged in all the rental units and making conservative cost estimates,⁷ net rental income would be as indicated in Table 14, page 106.

Assuming constant 1981 dollars, it would take about 23 years to pay the remaining 40% of the cost of the development, without taking into account financing costs. In the first 20 years net rent would be \$5,020,000, leaving a minimum loss to project sponsor in 20 years of roughly \$780,000; debt service would be an additional loss.

Project sponsor has rejected this alternative as economically unfeasible.

TABLE 13: ALTERNATIVE C MAXIMUM POSSIBLE SALES INCOME

	Alternative C		
	Moderate Income	Market Value	Proposed Project
No. studio units/ \$ per unit	6/\$85,000	5/\$106,000	13/\$106,000
No. 1-bedroom units/ \$ per unit	10/\$85,000	11/\$ 82,000	29/\$ 82,000
No. 2-bedroom units/ \$ per unit	24/\$85,000	24/\$133,000	8/\$133,000
No. 3-bedroom units/ \$ per unit	3/\$85,000	3/\$191,000	9/\$191,000
Total units/total \$ sales value	44/\$3,740,000	44/\$5,200,000	
Alternative totals	88/\$8,940,000		132/\$16,200,000

TABLE 14: MAXIMUM POSSIBLE SECTION 8 INCOME PER YEAR

	\$ Monthly Rent	\$ Annual Rent	Net Annual Rent
8 one-bedroom units	\$ 4,270	\$ 51,300	\$ 36,000
33 two-bedroom units	23,000	276,000	193,000
3 three-bedroom units	2,500	31,000	22,000
Total annual net rent			\$251,000

Notes: Mixed Housing Types Alternative

1. This is similar to an alternative proposed by the Potrero Hill Community Development Corporation at a 7 July 1980 meeting of the Potrero Hill Advisory Committee.

2. Moderate income households are defined by HUD as households whose income is between 80 and 120% of the HUD-determined median income (\$23,400) for the San Francisco Standard Metropolitan Statistical Area (SMSA). A family of 4 with a household income between \$18,700 and \$28,100 would currently qualify as moderate income.

3. Low income is defined by HUD as households whose income does not exceed 80% of the median income for the SFSMA, as determined by HUD. Median income for a family of 4 is currently \$23,400 per year. A family of 4 with a household income of up to \$18,720 per year would currently qualify as low income. HUD expects these figures to be revised in July 1981.

4. Section 8 of the Housing and Community Development Act of 1974, usually referred to as "Section 8."

5. HUD information in this section is from a telephone conversation between EIR consultant Kreines and Kreines and Steve Grossman, Housing Representative, San Francisco Area, HUD, 3 February 1981, except where otherwise indicated.

6. Robert Jolda, Economist, Economic and Market Analysis Division HUD, San Francisco Area Office, telephone conversation with Bendix Environmental Research, Inc., on 11 February 1981. This limit drops during periods of high interest rates so it is possible that none of the units in the proposed project would qualify as moderate income.

7. Assuming 10% management cost, 5% repair and maintenance cost, 10% utility cost, and 5% taxes.

D. No Project

The no project alternative would be inconsistent with the Master Plan, Residence Element, policy to "Encourage the conversion of underused non-residential land to residential use...", would provide no housing, and would yield no profits to the sponsor. There would be no construction or operation impacts associated with new development.

Deferral of a development decision would leave options for use of the site open for the future. Because this site is surrounded on 3 sides by residential development, it is unlikely that a new industrial use would be considered appropriate there. As there is commercial development 3 blocks east and west of the site, it is also unlikely that an entire block of commercial use would be considered by developers interested in the site. City policy, both in the Master Plan and in Proposition K, approved by City voters on November 4, 1980, encourages provision of new housing in the City. Whenever the decision is made to permit development of the site, residential or residential plus commercial development are the uses most likely to be approved. See Impacts Chapter Section M. for future construction in San Francisco.

The site is now vacant, and recent vandalism is evident throughout the interior of the structures. As there are hazardous substances, such as asbestos and PCBs, on the site, the property could have greater impacts on human health and safety with the no project alternative.

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Hastings College of the Law
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San Francisco, CA 94102

Stanford University Library
Government Documents Section
Stanford, CA 94305

University of San Francisco
Gleeson Library
Golden Gate and Parker Avenues
San Francisco, CA 94115

APPENDICES

- A. Proposed Project Costs
- B. Traffic
- C. Chemical Data
 - 1. Chemicals Found on Project Site
 - 2. Metal Compounds Used in Paint Pigments
 - 3. Soil Concentrations of Elements Found On Site
 - 4. Location of Core Samples
 - 5. Site Distribution of Arsenic
 - 6. Site Distribution of Cadmium
 - 7. Site Distribution of Chromium
 - 8. Site Distribution of Copper
 - 9. Site Distribution of Lead
 - 10. Site Distribution of Mercury
 - 11. Site Distribution of Zinc

APPENDIX A

Projected Project Costs

APPENDIX A

Proposed Project Costs

Basic Construction	\$9,756,000*
Land Cost	1,250,000
Land Carrying Cost	567,000
Demolition	300,000*
Site Preparation	175,000*
Architecture	325,000
Engineering	140,000
Legal	35,000
Soils	20,000
Marketing:	
Sales/Models	200,000
Financing	
Construction Loan 2pts	280,000
End Loans 1 pt	210,000
Interest during Construction	1,300,000
Homeowners Dues (by Developer)	<u>110,000</u>
Total Development Cost	<u><u>\$14,668,000</u></u>

*Construction costs

APPENDIX B

Traffic

LEVELS OF SERVICE DEFINITIONS
FOR SIGNALIZED INTERSECTIONS*

Level of Service A

Level of service A describes a condition where the approach to an intersection appears quite open and turning movements are made easily. Little or no delay is experienced. No vehicles wait longer than one red traffic signal indication. The traffic operation can generally be described as excellent.

Level of Service B

Level of service B describes a condition where the approach to an intersection is occasionally fully utilized and some delays may be encountered. Many drivers begin to feel somewhat restricted within groups of vehicles. The traffic operation can generally be described as very good.

Level of Service C

Level of service C describes a condition where the approach to an intersection is often fully utilized and back-ups may occur behind turning vehicles. Most drivers feel somewhat restricted, but not objectionably so. The driver occasionally may have to wait more than one red traffic signal indication. The traffic operation can generally be described as good.

Level of Service D

Level of service D describes a condition of increasing restriction causing substantial delays and queues of vehicles on approaches to the intersection during short times within the peak period. However, there are enough signal cycles with lower demand such that queues are periodically cleared, thus preventing excessive back-ups. The traffic operation can generally be described as fair.

Level of Service E

Capacity occurs at level of service E. It represents the most vehicles that any particular intersection can accommodate. At capacity there may be long queues of vehicles waiting up-stream of the intersection and vehicles may be delayed up to several signal cycles. The traffic operation can generally be described as poor.

Level of Service F

Level of service F represents a jammed condition. Back-ups from locations downstream or on the cross street may restrict or prevent movement of vehicles out of the approach under consideration. Hence, volumes of vehicles passing through the intersection vary from signal cycle to signal cycle. Because of the jammed condition, this volume would be less than capacity.

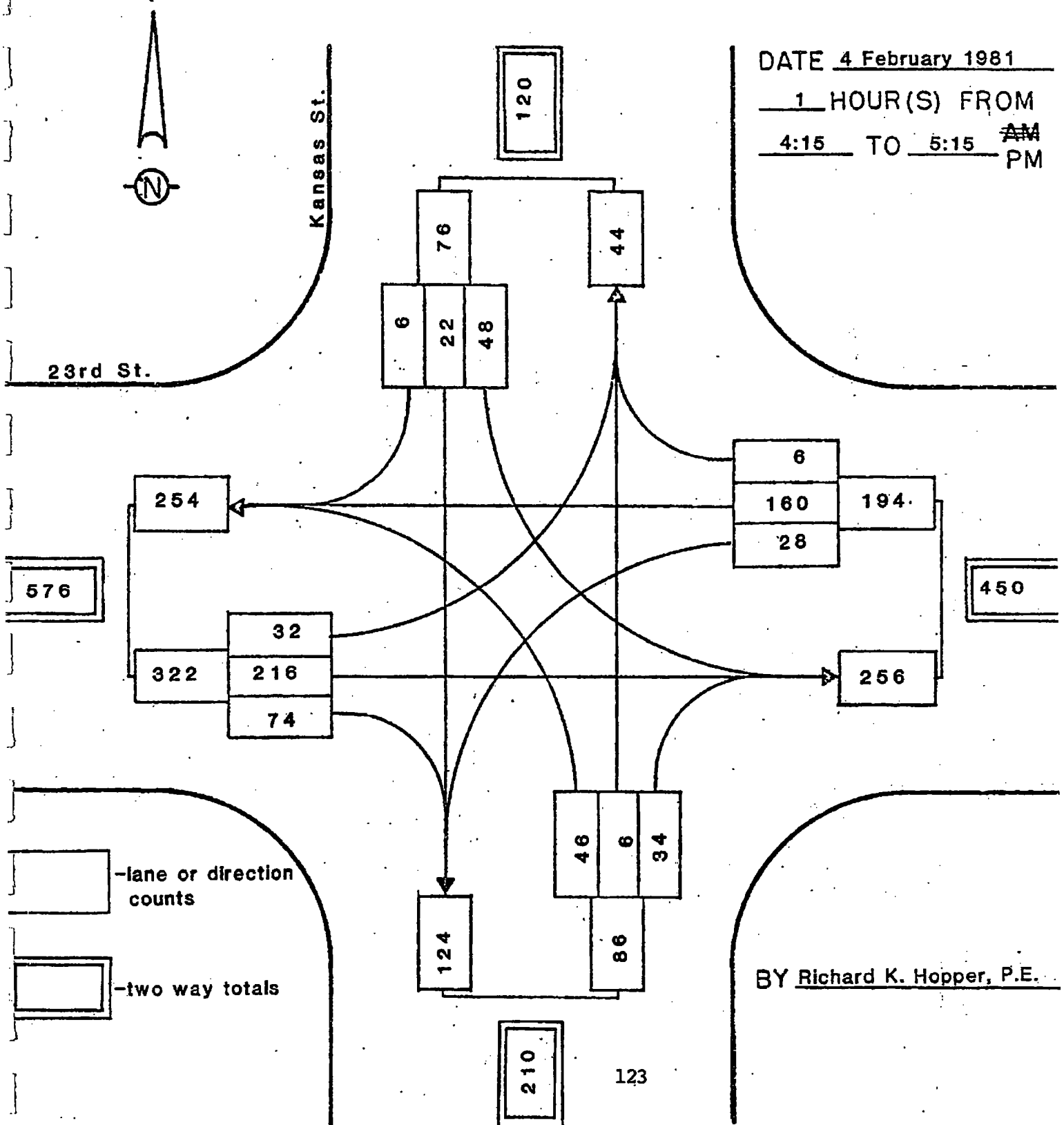
* City and County of San Francisco, Department of Public Works, Traffic Engineering Division

VEHICLE VOLUME

Graphic Summary Sheet

LOCATION 23rd St. & Kansas St.

DATE 4 February 1981
1 HOUR(S) FROM
4:15 TO 5:15 ~~AM~~ PM

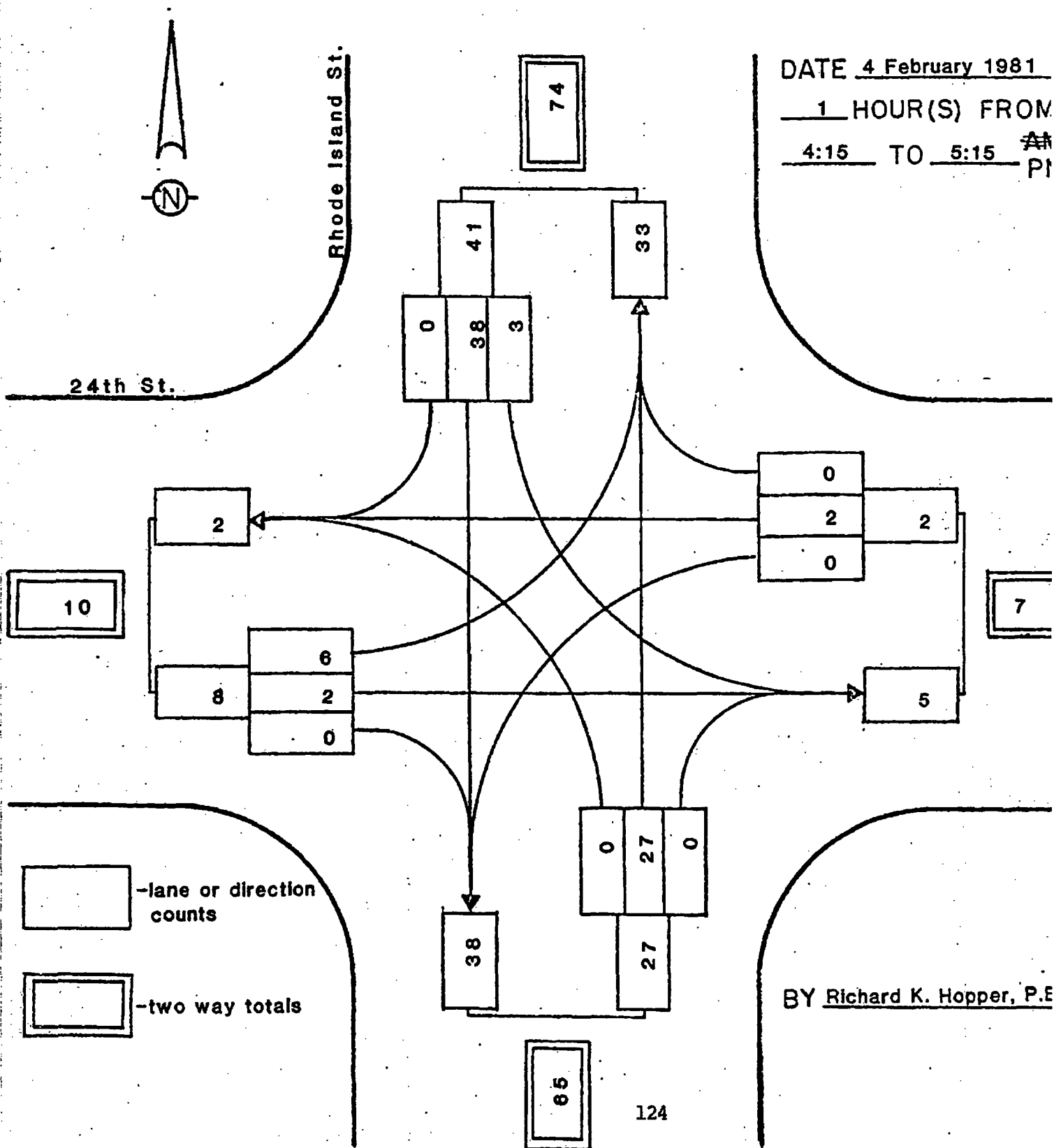


BY Richard K. Hopper, P.E.

VEHICLE VOLUME

Graphic Summary Sheet

LOCATION 24th St. & Rhode Island St.



BY Richard K. Hopper, P.E.

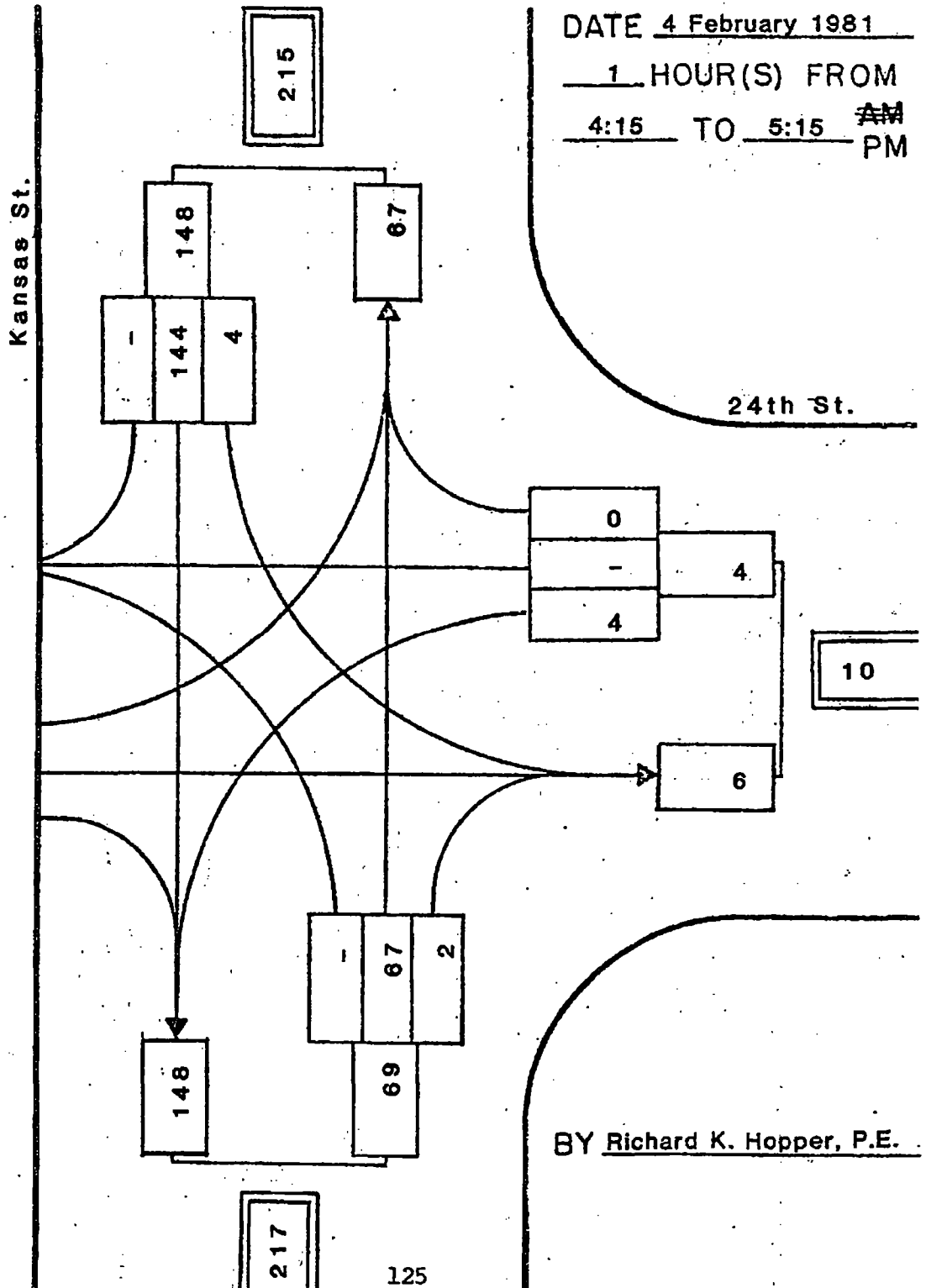
VEHICLE VOLUME

Graphic Summary Sheet

LOCATION 24th St. & Kansas St.



DATE 4 February 1981
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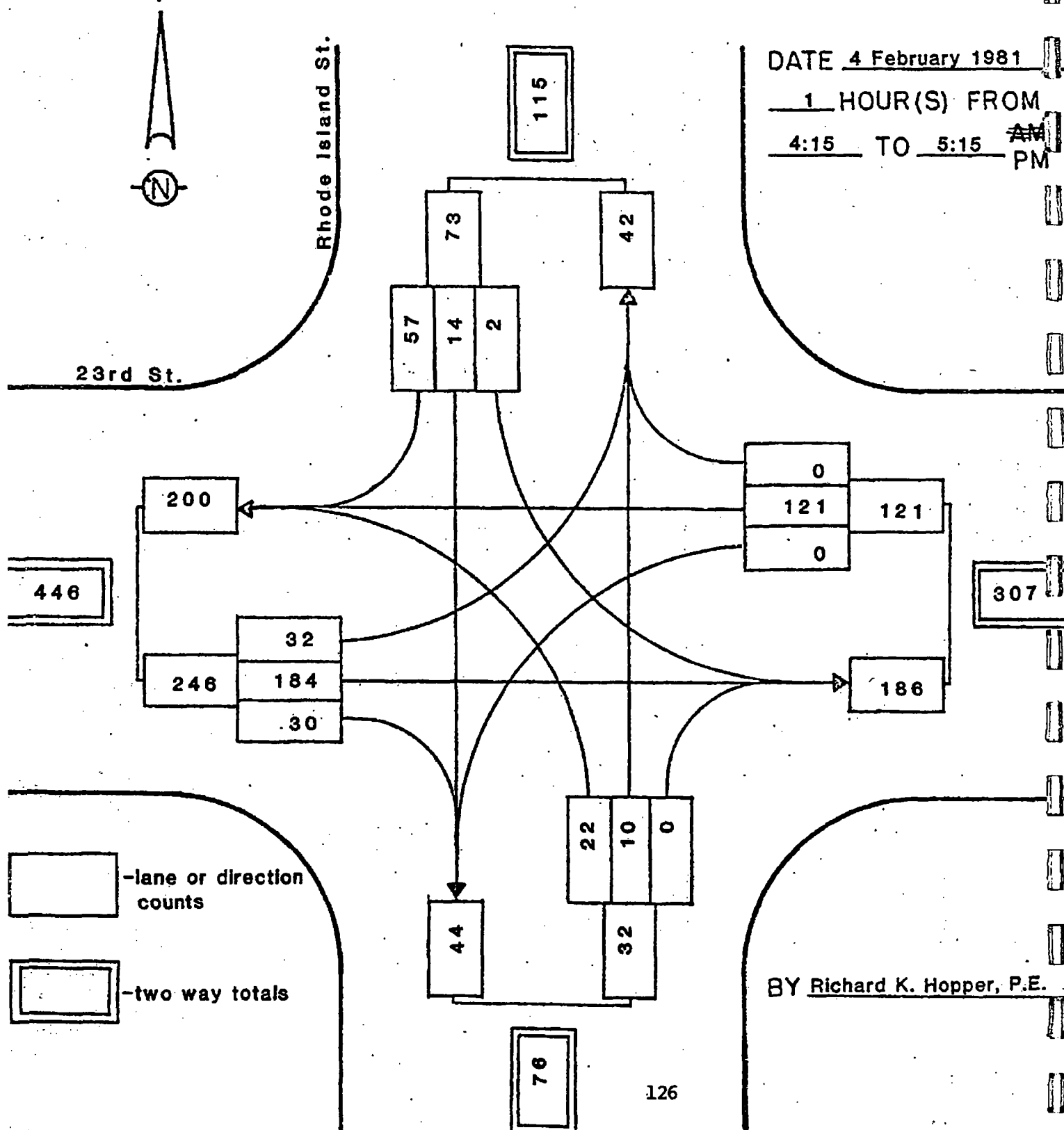
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LOCATION 23rd St. & Rhode Island St.

DATE 4 February 1981

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CAPACITY ANALYSIS SUMMARY OF INTERSECTIONS
ADJACENT TO PROJECT SITE

<u>Intersection</u>	<u>Heaviest Traffic</u>	<u>Lightest Traffic</u>	<u>Total</u>	<u>Capacity</u>	<u>Volume/ Capacity</u>	<u>Level of Service</u>
<u>Existing Conditions, 4:15-5:15 p.m.</u>						
23rd St. & Kansas St.	516	162	678	1175*	0.58	A
23rd St. & Rhode Island St.	376	105	481	900**	0.53	A
24th St. & Kansas St.	217	4	221	1000**	0.22	A
24th St. & Rhode Island St.	68	10	78	1000**	0.08	A
<u>With Project Traffic Added, 4:15-5:15 p.m.</u>						
23rd St. & Kansas St.	536	172	708	1175*	0.60	A
23rd St. & Rhode Island St.	374	111	485	900**	0.54	A
24th St. & Kansas St.	230	14	244	1000**	0.24	A
24th St. & Rhode Island St.	73	14	87	930**	0.09	A

* Institute of Transportation Studies, "Fundamentals of Traffic Engineering - 8th Edition," 1973, p. 7-7.

** Institute of Transportation Engineers, "Transportation and Traffic Engineering Handbook," 1976, pp. 347-350.

Source: Richard K. Hopper, Traffic Engineer

APPENDIX C

1. Chemicals Found On Site
2. Metal Compounds Used in Paint Pigments
3. Soil Concentrations of Elements Found On Site
4. Location of Core Samples
5. Site Distribution of Arsenic
6. Site Distribution of Cadmium
7. Site Distribution of Chromium
8. Site Distribution of Copper
9. Site Distribution of Lead
10. Site Distribution of Mercury
11. Site Distribution of Zinc

C.1: CHEMICALS FOUND ON PROJECT SITE.

Item	Bldg.	Level	Description	Manufacturer	Label	Opened?	Comments
1	1	Grnd.	1-5 gal drum Sol 150, "for pool chlorination," "corrosive"	Jones Chem. Corp., Cal- donia, NY	orig.	empty	
2			1-5 gal metal drum "Dromus," coolant, cutting oil		orig.	yes	
3		2	home size bathroom cleaning products		orig.	most	
4		3	2-5 gal plastic cans "Hard Water Rinse Fluid"	Natl. Insti- tutional Food Distri- butors Asso- ciates Inc., Atlanta, GA	orig.	yes	East side of fire escape.
5			1-5 gal plastic drum dark liquid, labelled "poison cleaner"		hand	yes	
6			1-3/4 gal "Lime-A- Way, contains: phosphoric acid "hydroacetic acid"		orig.	yes	Found moved and spilled 18 June. Corrosive. Contact with common metals produces hydrogen which may form flammable mixtures with air. Moderately irritating to eyes, skin, mucous membranes. Safe human expo- sure limit 0.1 parts per million (ppm) in air. Vapor forms explosive mixtures with air. Dangerous in contact with oxidizing materials. Flash Point 109° F.
7			2-5 gal containers soft brown solid	none	yes		Looks like cooking fat or wax.

CHEMICALS FOUND ON PROJECT SITE, Page 2.

Item	Bldg.	Level	Description	Manufacturer	Label	Opened?	Comments
8	1	3	1-50 gal cardboard drum Formula 251, boiler cleaner, contains sodium polyacrylate	Garrat-Callahan, Milbrae, CA	orig.	maybe	DOT required label: non-corrosive, non-toxic cleaning compound. pH approx. 8 (slightly basic).
9			1 home-size can Black Flag pesticide		orig.	yes	Some Black Flag products contain DDVP and isopropoxyphenyl methyl carbamate. DDVP produces human blood and skin effects at 1 part per trillion in air and is teratogenic. The carbamate has a safe human exposure limit of 0.5 ppt in air. Can gone as of 20 June 1980.
10		4	1- $\frac{1}{2}$ gal can paint remover, contains methylene chloride (dichloromethane)	Montgomery Ward	orig.	yes	Narcotic in high concentrations. Suspected human carcinogen. Human safe exposure limit 1000 ppm.
11		5	bathroom cleaning products		orig.	yes	
12		6	1-5 gal drum paint		none	yes	Near elevator; not in orig. container.
13	2	grnd.	1-1 gal can automotive lacquer		orig.	yes	Near Kansas St. entrance.
14			1-wooden box cleaning products		orig.	most	
15			1-50 gal, blue metal drum		hand	maybe	Labelled 3OH with 3 and possibly 0 crossed out and 4 written in.
16			50 to 100 1qt to 1 gal spray & non-spray paint cans		orig.	about $\frac{1}{2}$	

CHEMICALS FOUND ON PROJECT SITE, Page 3

Item	Bldg.	Level	Description	Manufacturer	Label	Opened?	Comments
17	2	grnd.	2-1 qt to 1 gal paint thinner		orig.	yes	
18			1-55 gal blue plastic not on label drum "Typewash #54A, S.E.X. typewash, "caution combustible"		yes	yes	
19			Approx 100 gal vat with bottom spigot. Paint?		unlabelled yes		Part full.
20			3-55 gal drums, "gasoline," "danger flammable"		hand	yes	Part full.
21			1-55 gal drum		unlabelled yes		
22	2		Assorted pt to gal cleaning products, including ammonia.		orig.	some	Irritant at 20 ppm in air.
23			1-5 gal drum floor wax		orig	?	
24			1-1 gal photographic fixer, contains: sodium thiosulfate, acetic acid		orig.	?	See Item 6.
25			Approx 10-1 qt paint cans		none	yes	
26	3		personal toiletries		orig	mostly	

CHEMICALS FOUND ON PROJECT SITE, Page 4

Item	Bldg	Level	Description	Manufacturer	Label	Opened?	Comments
27	2	4	household size paint & cleaning supplies		orig + mostly hand		
28	3	grnd (not base-ment here)	2-1 gal jugs Lucdol, 60% methyl ethyl ketone peroxide (2-butanone peroxide) dimethyl phthalate	Kodak	orig	?	Affects human intestinal tract. Flash Point 21 ⁰ F. Fire fighting should be done from an explosion resistant location. Carcinogenic in mouse. Teratogen in rat. Irritating to mucous membranes. Nervous system depressant. Human permissible exposure limit 5 ppm. Incompatible with nitrates.
29			8-1 gal "rapid fixer"		orig	some	
30			1-1 gal "Pakosol" print conditioner	Pako Corp., Minneapolis, Minn.	orig	?	
31			2-1 gal containers varnish remover, methylene chloride	Montgomery Ward.	orig	?	See Item 10.
32		3	1-1 gal linseed oil		orig	yes	
33		4	1-1 gal "all purpose cleaner"				
34	3,4,5	loading dock	10-50 gal metal drums full of liquid		none	yes	Non-flammable, acidic, similar contents.
35	4	grnd	1-blue plastic, 50 gal drum		none	no	Near entrance to bldg. 3.

CHEMICALS FOUND ON PROJECT SITE, Page 5

Item	Bldg.	Level	Description	Manufacturer	Label	Opened?	Comments
36	5	N/A	2-55 gal drums "Swifts Adhesive"		orig	yes	
37			1-5 gal plastic drum "Flexichrome green"		orig	yes	
38			7-55 gal drums "urea resin"	Reichhold Chem	hand	maybe	
39			1-55 gal drum "sand"		hand	maybe	
40			6-55 gal drums iso-butanol		hand	maybe	Flash Point 82°F. Firefighting should be done from an explosion-resistant location. Carcinogenic in rat. Mildly irritating to skin and mucous membranes. Narcotic in high doses.
41			2-55 gal drums "White glue"		hand	yes	
42			9-5 gal cans cement sealer, "Steel coat"		orig	maybe	
43			8-5 gal cans Tremco-300, "sealer for concrete floors," contains: urethane, polyester resin, epoxy resin, alkyd resin		orig + hand	maybe	carcinogenic in rat, mouse, guinea pig and hamster. Teratogenic in rat, mouse and hamster.
44			approx 10-1 gal cans latex stain		orig	no	

CHEMICALS FOUND ON PROJECT SITE, Page 6

Item	Bldg.	Level	Description	Manufacturer	Label	Opened?	Comments
45	5	N/A	approx 50-1 qt cans paint		orig	no	
46			1-55 gal drum "pine glaze," contains petroleum distillates and/or industrial solvents	Lily Industrial Coatings, 901 W Union St, Montebello, CA	orig + hand	yes	
47			2-3 gal containers "Plastiglaze type c, aluminum grade"		orig	yes	
48			2-55 gal drums "Polalyte Resin solution, contains: styrene,	Reichold, LA	orig	maybe	Flash Point 90°F. Forms explosive mixtures with air. Vapor may travel considerable distance to source of ignition then flash back. Fire-fighting should be done from an explosion resistant position. Eye and respiratory irritant. Keep away from oxidizing agents.
			and/or "acrylite monomers"				
49			1-55 gal drum "carpet adhesive"		hand	yes	Found spilled on 20 June; is adhesive.
50			11-55 gal cardboard drums, 1 labelled Dylite expandable polyester; open drums contain powder		orig	yes	

CHEMICALS FOUND ON PROJECT SITE, Page 7

Item	Bldg.	Level	Description	Manufacturer	Label	Opened?	Comments
51	5	N/A	1-55 gal drum "lube oil"		stencil	yes	Not full.
52			1-55 gal drum "Aluminum sealer"	Parwaf Mfg. LA	orig + hand	yes	
53			1-5 gal drum "darkroom"		hand	yes	
54			8-55 gal drums stucco patch		stencil	maybe	
55			1-55 gal cardboard drum spackling powder		orig?	yes	South side of bldg. May contain asbestos. Found spilled 20 June.
56			18-1 gal cans Dursban 2E insecticide (lorsban, Chlorpyrifos)	Dow	orig	no	Soil insecticide for control of wire worms, cutworms, corn rootworms. Occupational exposure limit 0.2 ppm in air. Cans nearly rusted through.
57			15-55 gal, old, metal drums	Orig label Harvest Base Co.		yes	No indication of nature of contents. Some with red spray paint crosses.
58	6	grnd	2-55 gal plastic drums clay slip		hand	maybe	One found spilled 20 June.
59			approx 20 bags fertilizer, ammonium nitrate		orig	some	Explosive. Organic matter can sensitize to more readily explodable state. Melts at 337°F. Emits toxic gases on decomposition. Responsible for 1947 Texas City disaster.
60	8	grnd	2-55 gal drums "diatomaceous earth"		hand	yes	Made up of fused silica, spherical submicroscopic particles under 0.1u.

CHEMICALS FOUND ON PROJECT SITE, Page 8

Item	Bldg.	Level	Description	Manufacturer	Label	Opened?	Comments
61	10&11	grnd	1-1 gal bottle hydro-chloric acid		orig	yes	Found moved on 20 June 1980. Fatal at 1500 ppm in air. High reactivity. Contact with common metals produces hydrogen which may form explosive mixtures with air. Keep away from oxidizable materials.
62			1-1 gal container soda ash (sodium carbonate)		orig	yes	Eye and skin irritant.

C.2: Toxicity of typical inorganic paint pigments.

Common Name	Chemical Name	Chemical Formula	Color	Human Target Organs	Occupational Permissible Exposure Limits in milligrams/cubic meter air ¹	Comments
Litharge	lead oxide	PbO	yellow	blood, nervous system, kidney	0.002	
Orpiment	arsenic trisulfide	As ₂ S ₃	yellow	intestinal tract, skin, nervous system	0.002	Now little used; carcinogen ²
Paris Green	copper acetate meta-arsenate or copper, bis (acetato) hexa-meta-arsenito-tetra-	Cu(C ₂ H ₃ O ₂) ₂ · 3Cu(AsO ₂) ₂	green	intestinal tract, nervous system	0.002	
137 Realgar	arsenic disulfide	As ₂ S ₂	brownish-red	intestinal tract, skin, nervous system	0.002	Now little used; carcinogen
Cadmium Yellow	cadmium sulfide	CdS	yellow	kidney, lungs	0.04	carcinogen
Cadmium Red	cadmium sulfide/cadmium selenide mixtures	CdS CdSe	light red to maroon	kidney, lungs, liver, prostate, blood	0.04	carcinogen
Chrome Yellow	lead chromate	PbCrO ₄	yellow	blood, nervous system, kidney	0.05	carcinogen
Red Lead	lead oxide	Pb ₃ O ₄	red	kidney, blood, nervous system	0.05	used to protect steel

C.3: Comparison of normal soil concentrations of some elements and minimum and maximum concentrations found on site.

Element	Normal Soil Range ppm	Site Values					
		Minimum ppm bore # depth			Maximum ppm bore # depth		
Cadmium	0.1 - 7 ¹	<0.6	4	3 feet	17	S	0 feet
Chromium	trace - 250 ⁵	34	3	4.3	1000	8	9.4
Copper	2 - 150 ¹	7.9	4	3	160	S	0
Lead	1 - 200 ^{3,4}	5.6	1	15.3	4800	S	0
Mercury	0.1 ²	0.12	8	9.4	8.6	S	0
Zinc	trace - 250 ⁵	19	8	9.4	4200	S	0
Arsenic	1 - 70 ⁶	3.5	3	4.3	60	4	15

1 "The Nature and Properties of Soils," 8th Ed. Nyle, C. Brady, MacMillan 1974.

2 Average concentration. "Mercury in Your Environment," Bendix, Selina, Oceanic Society, 1971, p.1.

3 Zimdahl, Robert L. & Skogerboe, Rodney K. "Behavior of Lead in Soil," Environmental Science and Technology, 11:1202-1207(1977).

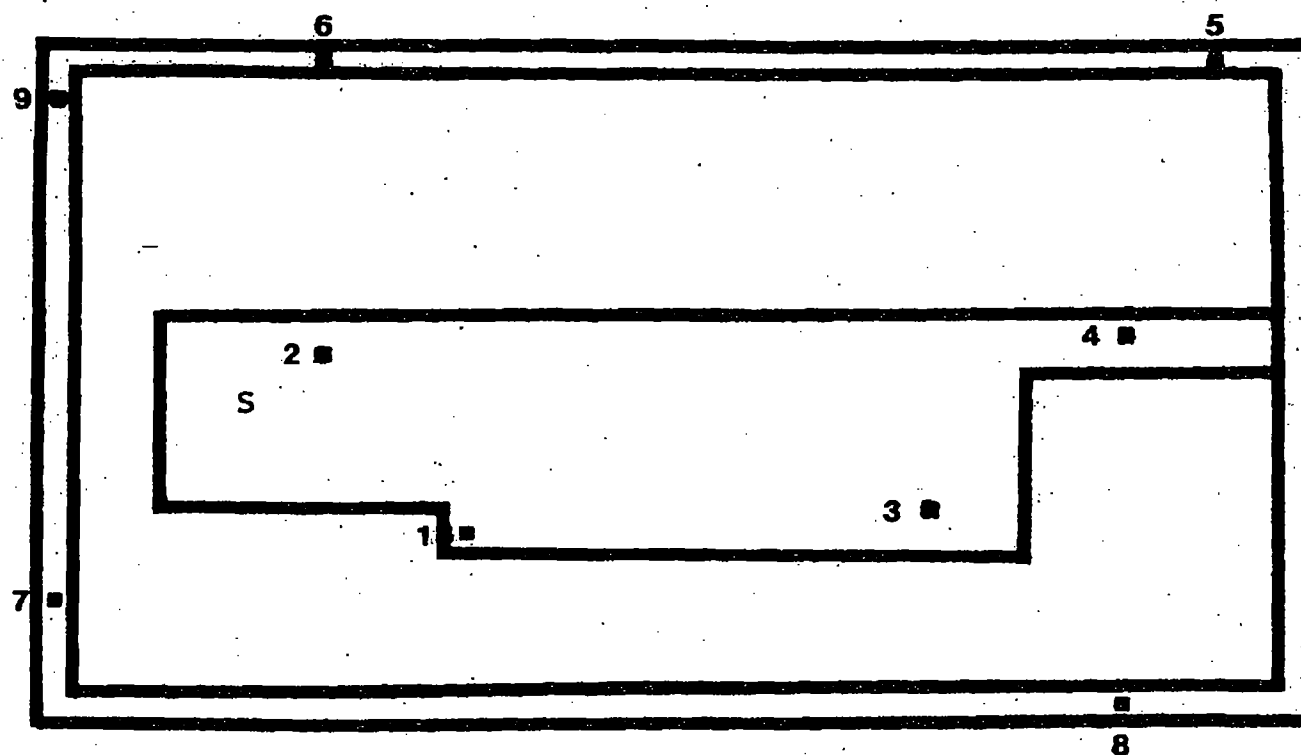
4. Soil used to replace lead-contaminated soil in an Oakland park was found to have 15-19 ppm lead* (*Wesolowski, Jerome, J., "The Identification and Elimination of a Potential Lead Hazard in an Urban Park," Archives of Environmental Health, 34:413-418(1979)).

5 Baetjer, Anna M., "Chromium," Proc. Symp. Toxicity of Metals, Industrial Health Fdn, 1975.

6 Bear, Firman E., "Chemistry of Soil," p. 366, 2nd Ed., 1964.

S = surface sample.

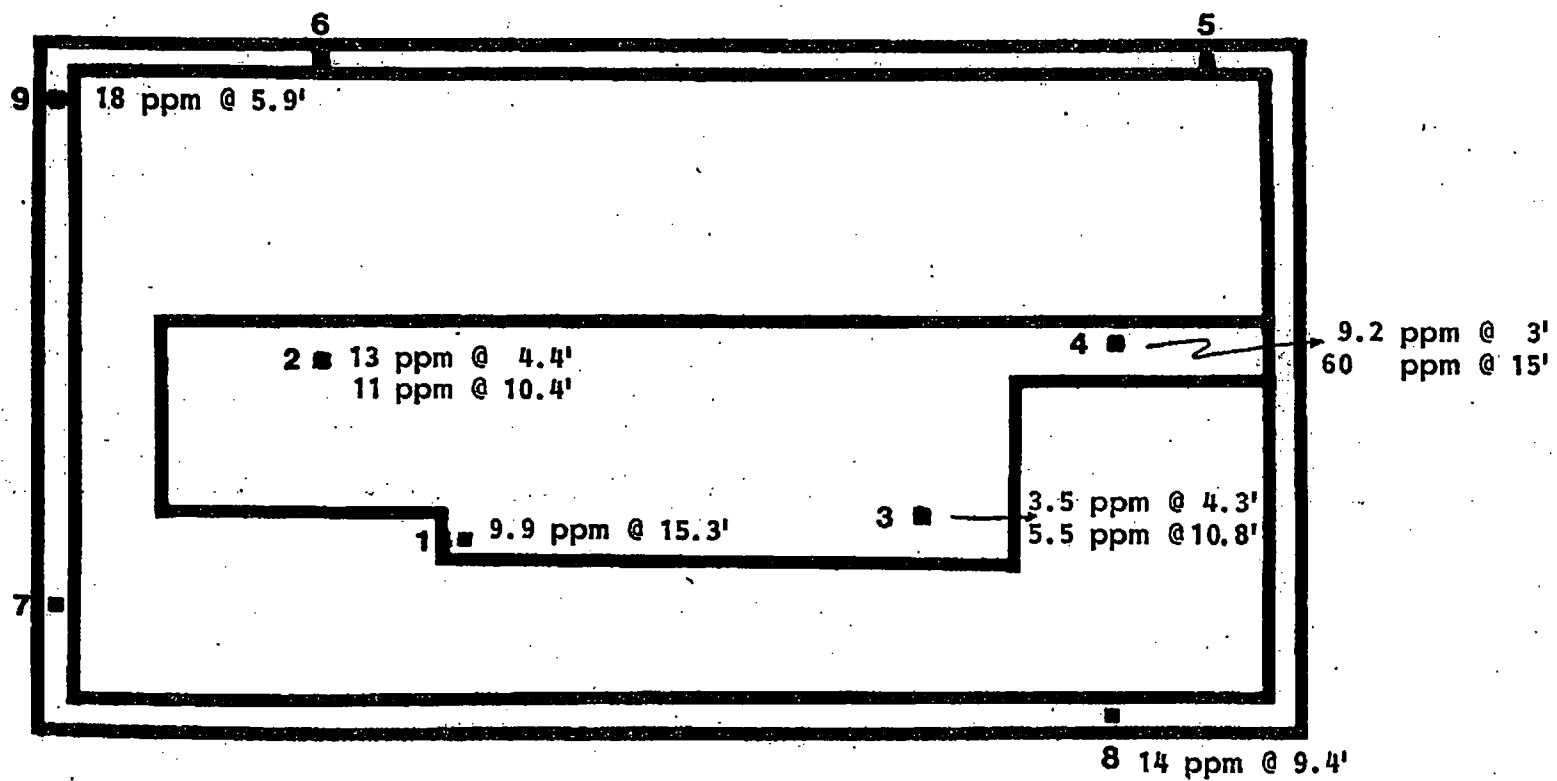
C.4: Location of Core Samples.



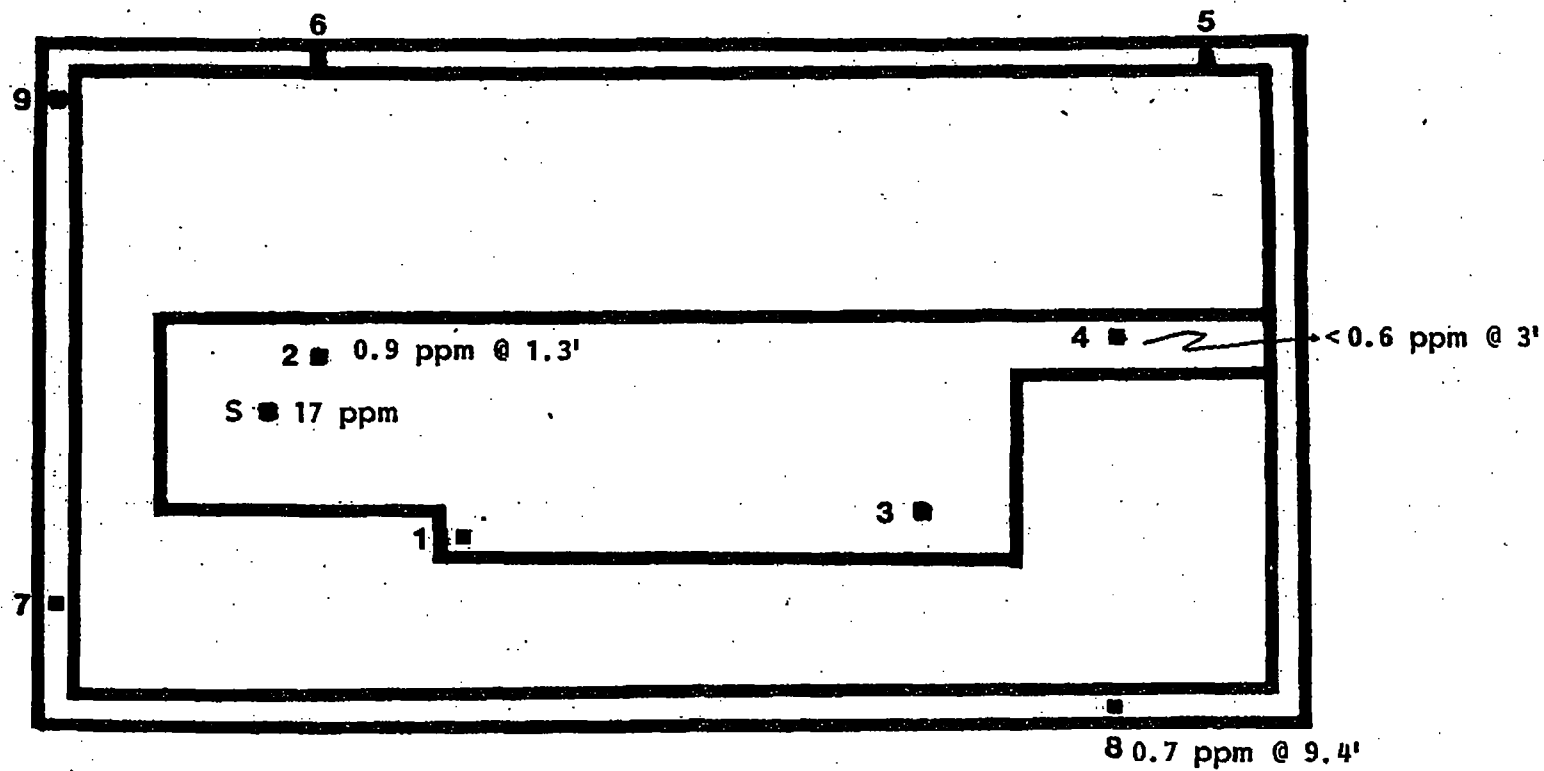
S: Location of Surface Sample



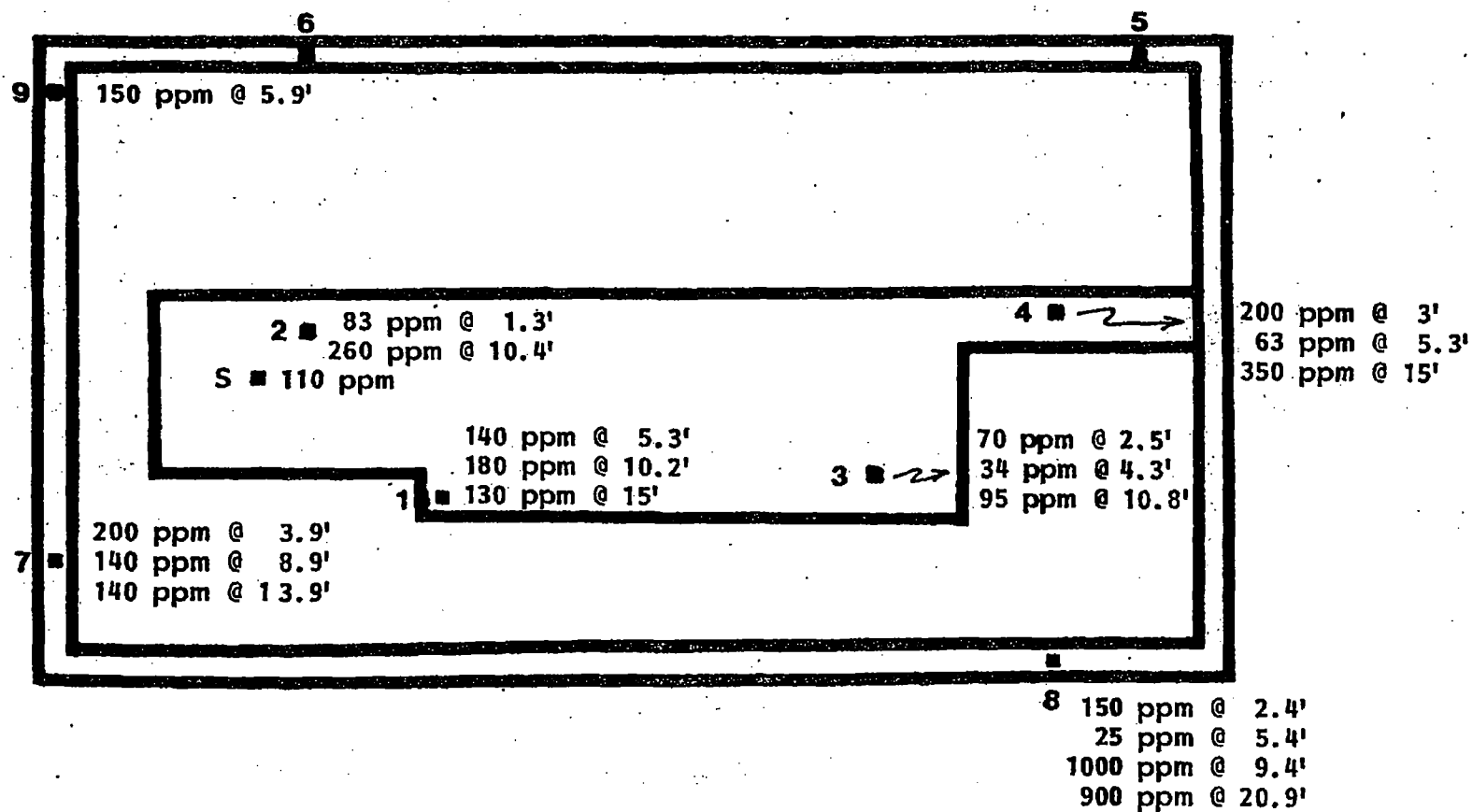
C.5: Distribution of ARSENIC on the site.



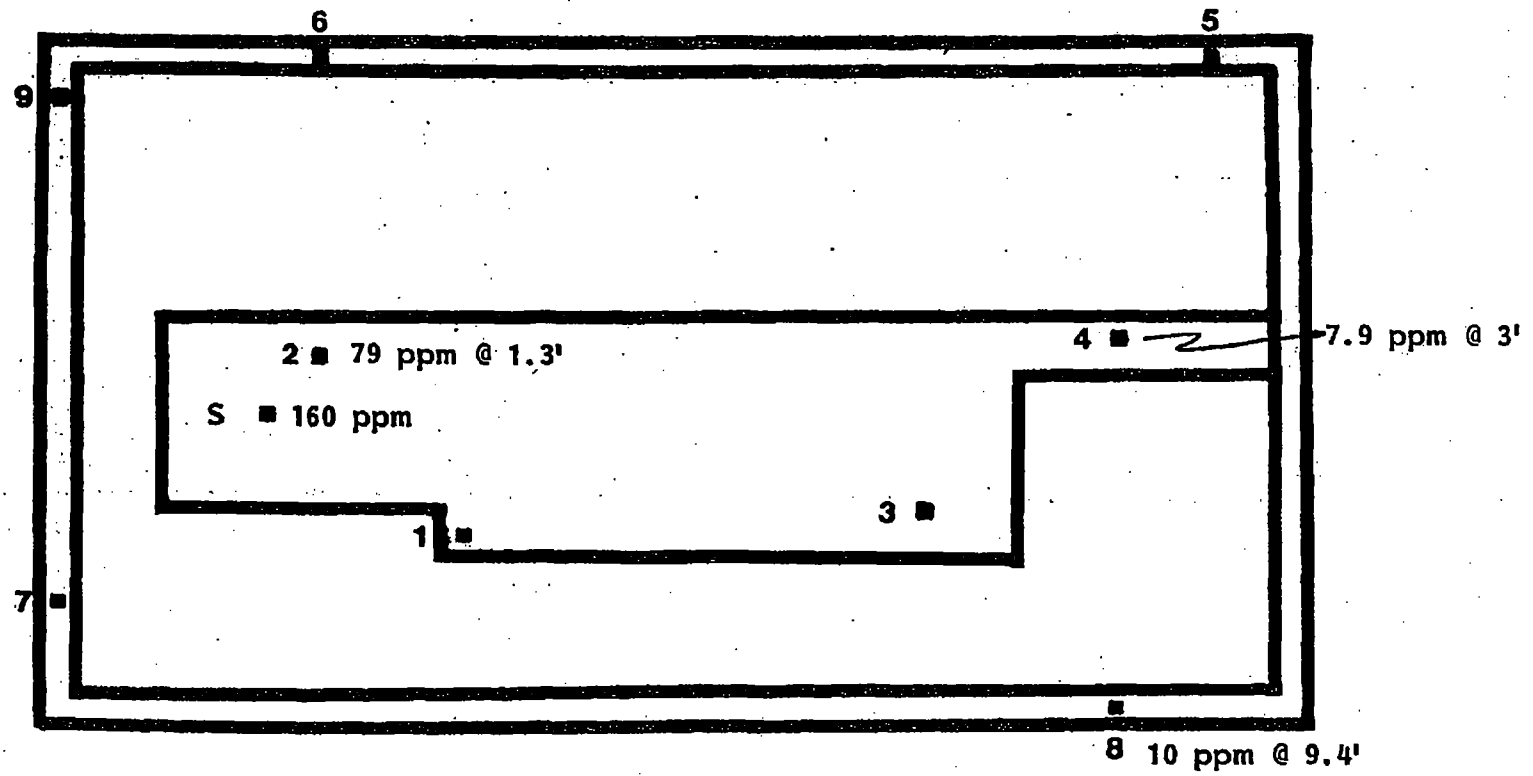
C.6: Distribution of CADMIUM on the site.



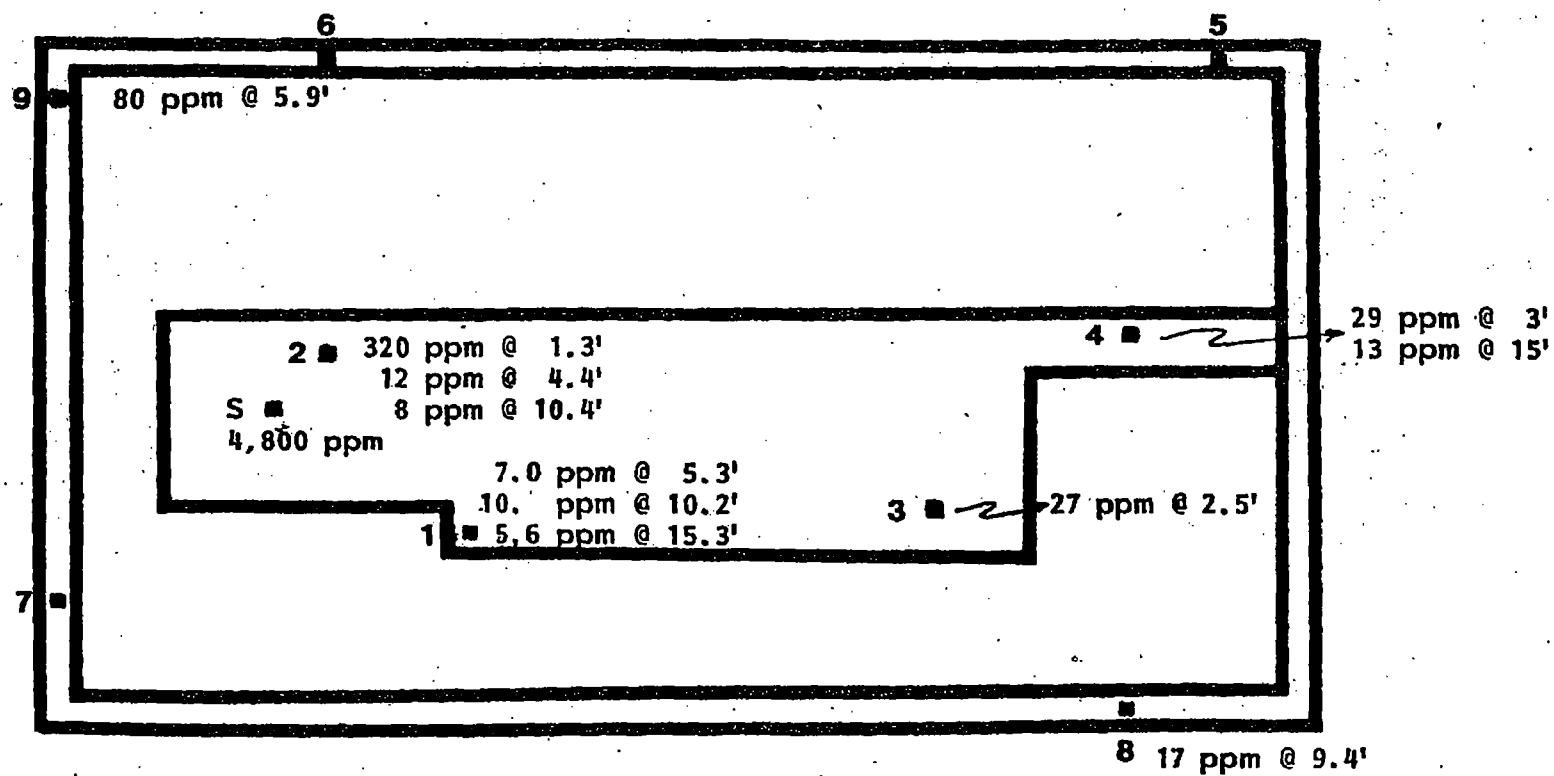
C.7: Distribution of CHROMIUM on the site.



C.8: Distribution of COPPER on the site.

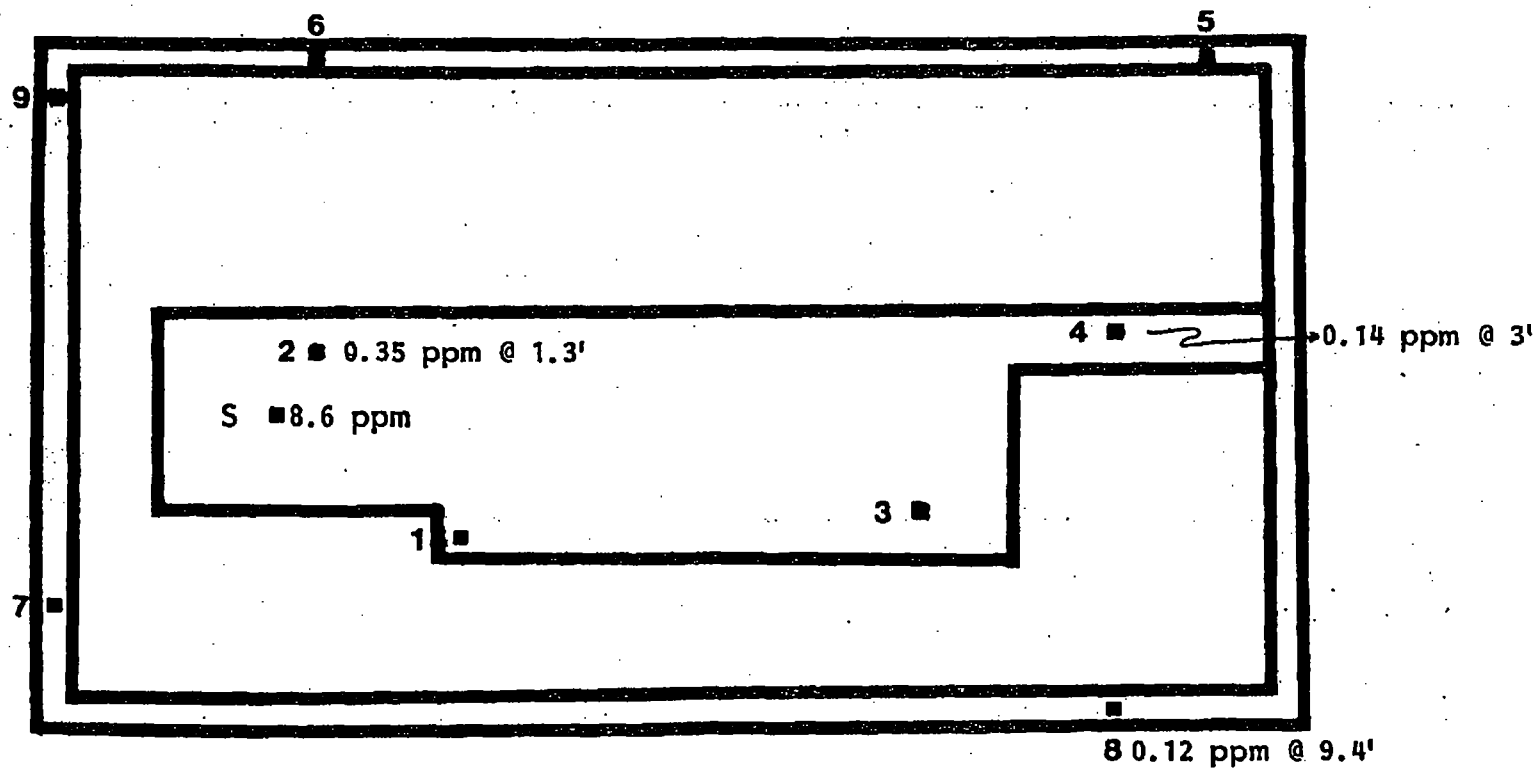


C.9: Distribution of LEAD on the site.

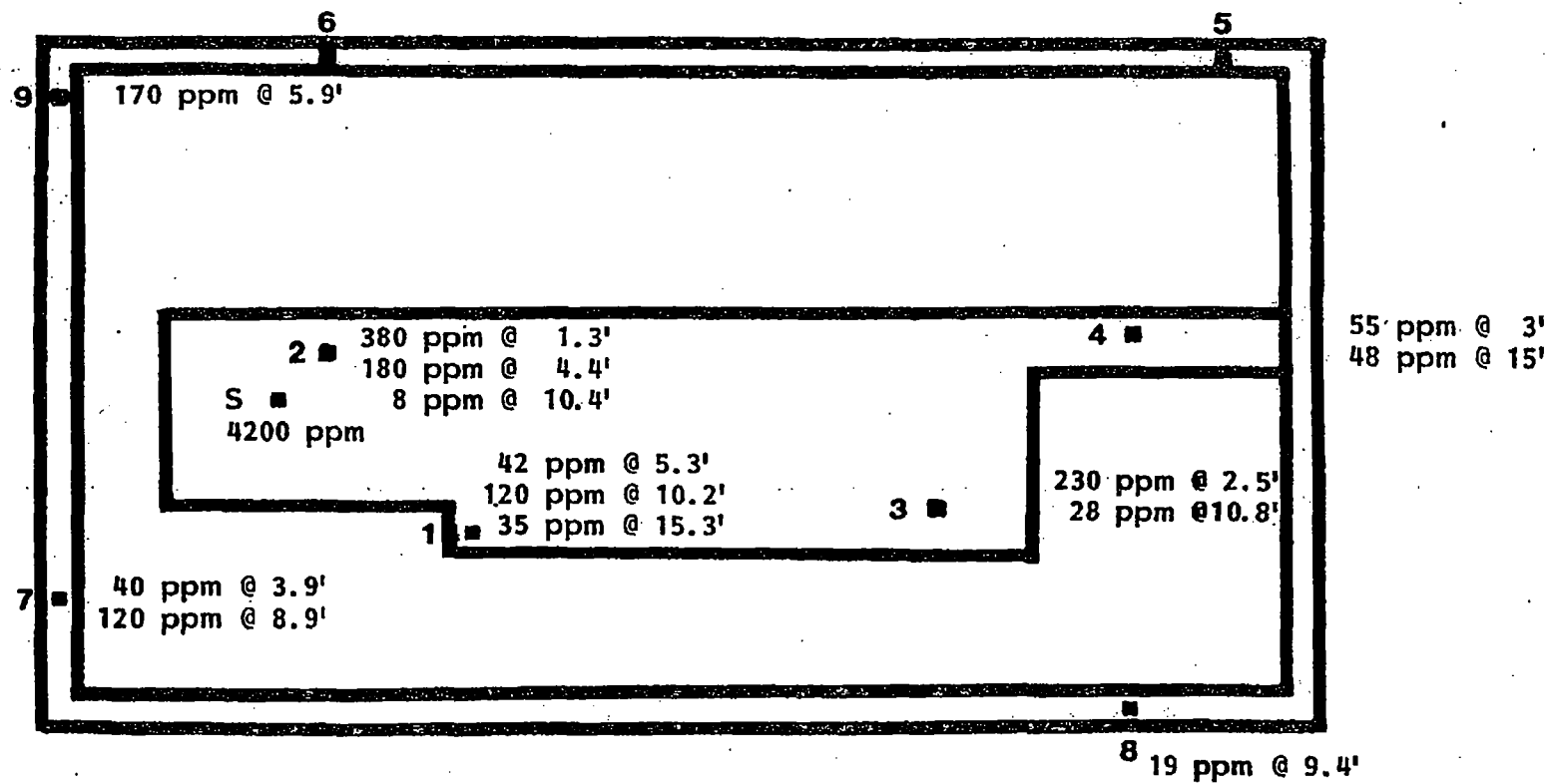


C.10: Distribution of MERCURY on the site

145



C.11: Distribution of ZINC on the site.





DEPARTMENT OF CITY PLANNING

100 LARKIN STREET · SAN FRANCISCO, CALIFORNIA 94102

FINAL ENVIRONMENTAL IMPACT REPORT

2222 23RD STREET

EE 80.110

State Clearinghouse No.: SCH 81040705

Changes from the text of the Draft EIR are indicated by solid dots. A dot to the left of a sentence indicates a new or revised sentence. A dot to the left of a paragraph indicates a new or revised paragraph. A dot to the left of the title of a table indicates a new or revised table. A dot to the left of a page number indicates a new page.

Publication Date : March 27, 1981

Public Comment Period: March 30, 1981 through May 14, 1981

Public Hearing Date: April 30, 1981

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TABLE OF CONTENTS

	<u>Page</u>
List of Exhibits	iv
List of Tables	v
I. SUMMARY	1
II. PROJECT DESCRIPTION	4
A. Sponsor and Objectives	4
B. Location	4
C. Description	4
D. Required Project Approvals	16
III. ENVIRONMENTAL SETTING	18
A. Land Use and Zoning	18
B. History of the Site	25
C. Transportation	28
D. Noise	33
E. Topography and Geology	37
F. Plants	38
IV. ENVIRONMENTAL IMPACT OF THE PROPOSED PROJECT	39
A. Land Use and Zoning	39
B. Historic Structures	40a
C. Comprehensive Plan and Other City Policies	40a
● D. Economic and Employment Impacts	43
E. Transportation	46
F. Noise	51
G. Air Quality	54
H. Toxic Substances	60
I. Energy	71
J. Community Services	77
K. Topography and Earthquake Effects	81

TABLE OF CONTENTS (Cont'd)

	<u>Page</u>
IV. ENVIRONMENTAL IMPACT OF THE PROPOSED PROJECT (Cont'd)	
L. Plants	82
M. Short Term Use of Man's Environment vs. the Maintenance of Long Term Productivity	82
N. Growth Inducing Effects	82
O. Neighborhood Concerns	84
V. MITIGATION MEASURES	86
A. Urban Design	86
B. Historic Structures	86
C. Housing Cost	87
D. Noise	87
E. Toxic Substances	88
F. Energy	93
G. Structural Safety	95
● H. Traffic	96
VI. ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED IF PROPOSAL IS IMPLEMENTED	98
A. Land Use	98
B. Noise	98
C. Energy	98
D. Air Quality	98
E. Toxic Substances	98
VII. ALTERNATIVES	99
A. Low Density Alternative	99
B. High Density Alternative	102
C. Mixed Housing Alternative	104
D. No Project	108

TABLE OF CONTENTS (Cont'd)

	<u>Page</u>
● VIII. SUMMARY OF COMMENTS AND RESPONSES	109
IX. EIR AUTHORS AND CONSULTANTS:- ORGANIZATIONS AND PERSONS CONTACTED	147
X. DISTRIBUTION LIST	151
● XI. CERTIFICATION RESOLUTION	156
<u>Appendices</u>	
A. Proposed Project Costs	159
B. Traffic	161
C. Chemical Data	167

LIST OF EXHIBITS AND TABLES

	<u>Page</u>
<u>Exhibits</u>	
1. Regional Location	2
2. Site Location	5
3. Existing Site	6
4. Rhode Island St. and Kansas St. Elevations	8
5. 23rd St. Elevation	9
6. 24th St. Elevation	10
7. Kansas Street Grade Plan	11
8. First Floor Plan	12
9. Second Floor Plan	13
10. Third Floor Plan	14
11. Fourth Floor Plan	15
12. Zoning	19
13. Photograph of Site and Freeway and Photo- graph from Site of Kansas St. and 23rd St.	20
14. Existing Land Use	21
15. Photograph of Buildings Facing Site on Rhode Island St. and Photograph of Buildings Facing Site on 23rd St.	22
16. Wisconsin Street Site	23
17. Photograph of Chimney and Garage to be Retained	26
18. Street Map Showing Connections To and From James Lick Freeway	29
19. Transit Service	31
20. Noise Measurement Locations	34
21. Relationship of Zinc and Lead Concentrations to Depth in Soil	66
22. Low Density Alternative	100
23. High Density Alternative	103

LIST OF EXHIBITS AND TABLES (Cont'd)

	<u>Page</u>
<u>Tables</u>	
1. Unit Types and Prices	16
2. Street Characteristics	28
3. Ambient Noise Measurements	35
4. Allowable Housing Density by Zoning District	40
• 5. Estimated Project-Generated Municipal Tax Revenues in 1980 Dollars, Calculated at 1980-1981 Tax Rates	44
• 6. Table 6 deleted	
7. Average Weekday Vehicular Trip Generation	47
8. San Francisco Quarterly Air Lead Concentrations in Milligrams Per Cubic Meter, MG/M ³	56
9. Energy Intensiveness of Typical Building Materials	71
10. Crime Incidence in Project Area	78a
11. San Francisco Heat Loss Through Single- and Double-Glazed Windows	93
12. Maximum HUD, Section 8, Fair Market Rents	104
13. Alternative C, Maximum Possible Sales Income	106
14. Maximum Possible Section 8 Income Per Year	106
• 15. Comparison of 2/4/81 and 5/12/81 Traffic Counts	124
• 16. Five-Year Traffic Accident Record for Project Area	125
• 17. Alternative D-1. Proposed Project + 25% Bonus	106b

I. SUMMARY

A Planned Unit Development (PUD), consisting of 132 condominiums, 8500 square feet of neighborhood-oriented commercial space, and 161 parking spaces, is proposed for the former paint manufacturing site including the entire block bordered by Kansas, 23rd, Rhode Island and 24th Sts. The project would include rezoning from RH-2 (House, Two-Family) to RM-2 (Mixed Residential, Moderate Density), to be requested by project sponsor. A 60-foot-tall building at Kansas and 24th Sts. would be remodeled into housing units, and a chimney on Rhode Island, listed in the Department of City Planning Architectural Survey, would be preserved. The site is on the east edge of the James Lick Freeway and is subject to Freeway noise.

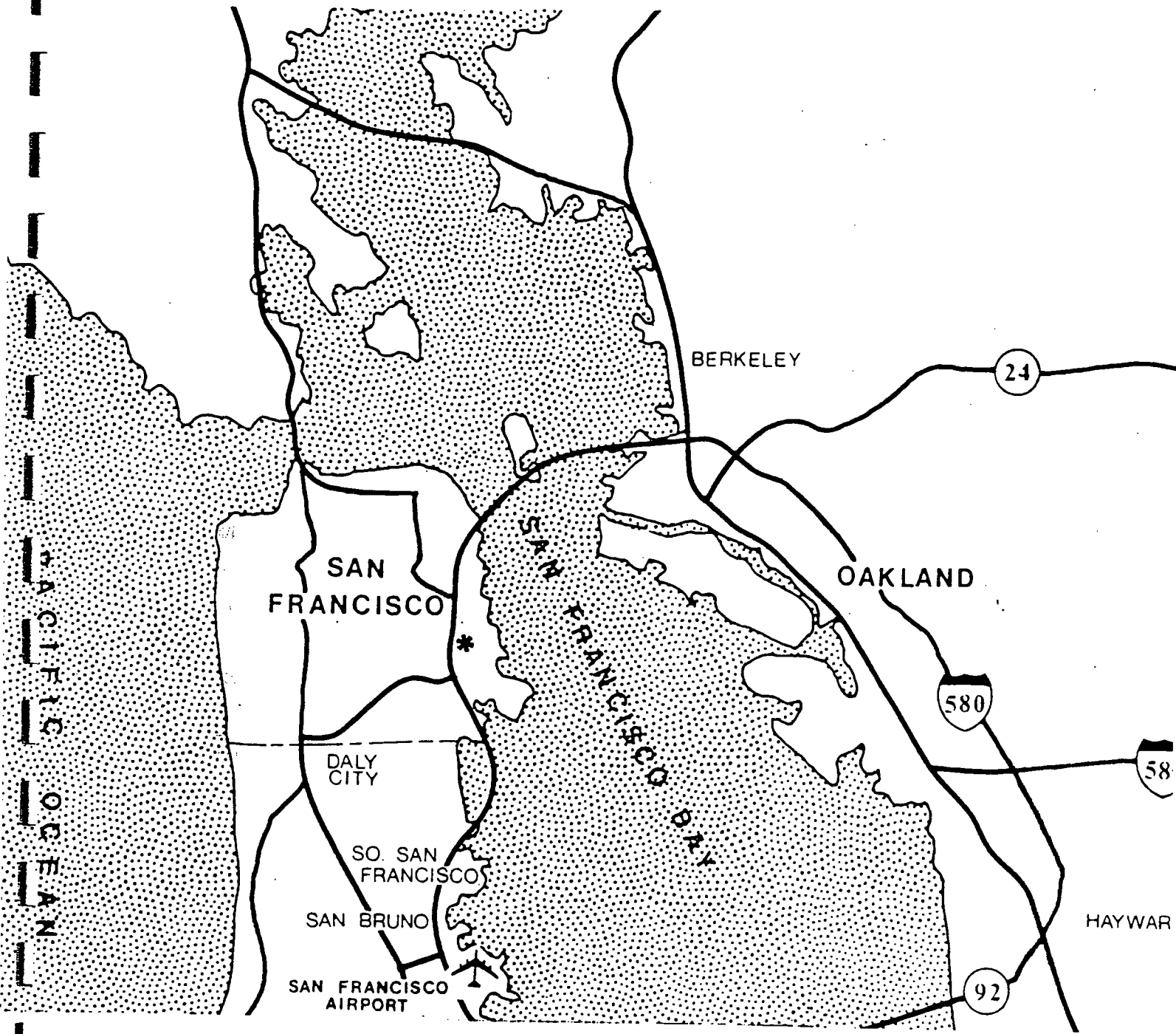
The project design would generally maintain the present site development configuration with a perimeter of structures surrounding central, common open space. New construction would comply with the 40 ft. height limit.

The project would comply with Master Plan policies encouraging the use of underused land and development of a variety of housing unit types by provision of 13 studios, 29 one-bedroom, 81 two-bedroom and 9 three-bedroom units on an unused site.

The project would generate about 740 vehicle trips per day. The four bounding streets would remain at Level of Service A with this additional traffic; and freedom of pedestrian movement would not be affected. Off-street parking within the project and now unused street parking space would accommodate project-generated parking needs.

The relatively high noise levels on the west side of the project would be mitigated by use of sound attenuating construction materials to bring interior noise levels to a non intrusive level.

Toxic materials in containers on the site have been removed. Demolition and renovation will be conducted so as to prevent dispersion of toxic dust in the neighborhood. The incinerator will be sealed to prevent access to toxic materials inside. Heavy metal paint ingredients spilled on the site presently contaminate the soil. After removal of the concrete slabs which cover most of



Regional Location

* Project

0 5 miles



Exhibit No. 1

the site, a soil analysis program and appropriate mitigation measures will be developed in consultation with the Hazardous Materials Section of the State Department of Health Services. Electrical equipment containing PCBs and PCB spills will be removed prior to demolition.

Some neighborhood groups have expressed concerns over the potential effect of the proposed project on housing price inflation in the Potrero Hill area..

Four alternatives to the proposed project have been considered, including the No Project Alternative. A Low Density Alternative, complying with present RH-2 zoning, could include 53 units which would be more expensive than the project because of the small number of units and absence of remodeled units. A High Density Alternative, requiring reclassification to RM-3 rather than RM-2, could include 200 units. This Alternative would be out of scale with surrounding development. A Mixed Housing Alternative, evenly divided between market rate, moderate income condominiums and Section 8 subsidized low income rental units, was also considered and found to not be economically feasible.

II. PROJECT DESCRIPTION

A. Sponsor and Objectives

The project sponsor is "2222 23rd Street," a San Francisco partnership, and the project architect is Architects Associated.¹ The objectives of the sponsor are to provide housing, to provide a return on the investors' money, and to produce a project sensitive to the site-specific issues discussed in the DEIR.

B. Location

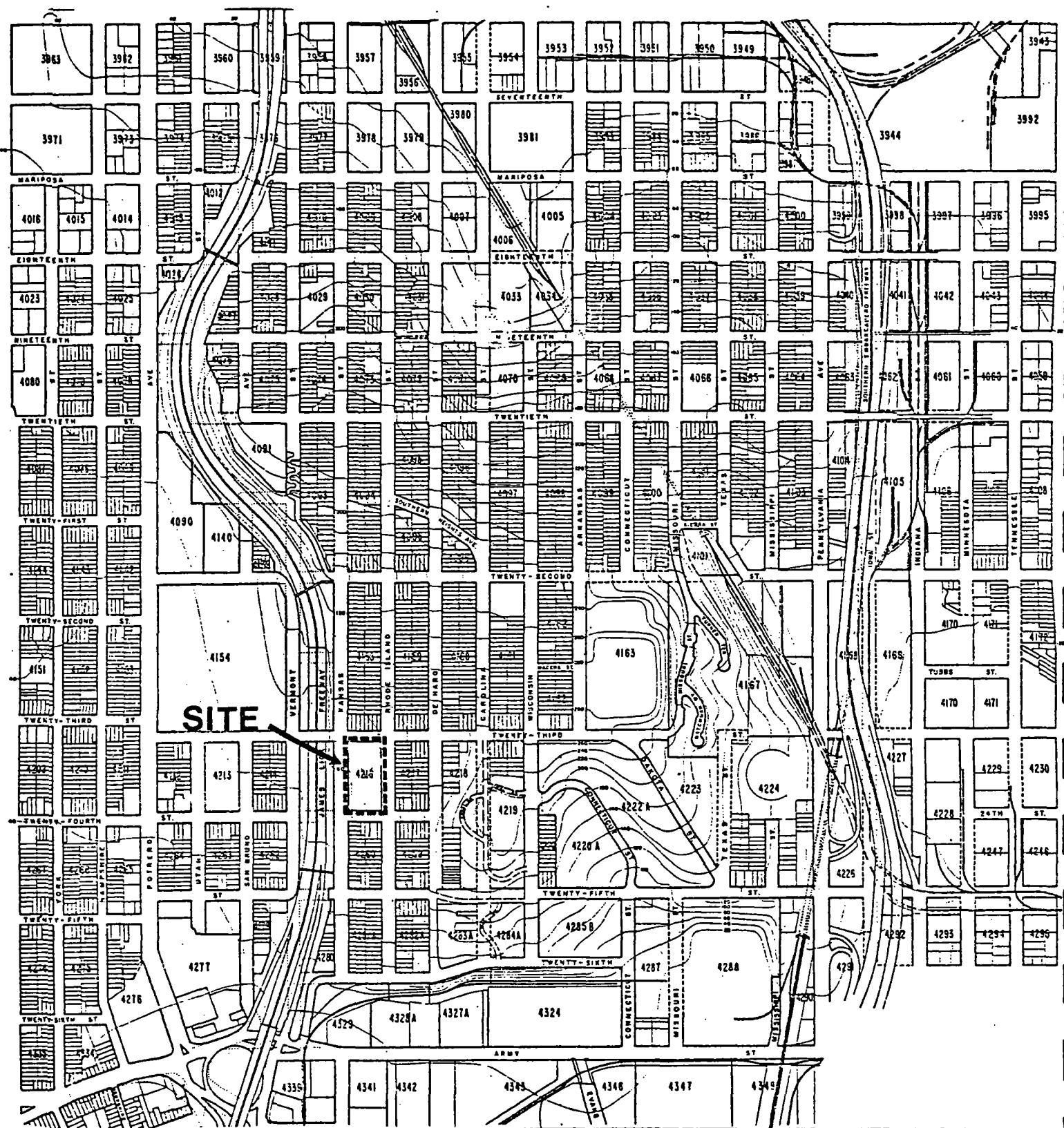
The project site is an 80,000 square foot, 1-block area at the western base of Potrero Hill in southeastern San Francisco (see Exhibit 2, page 5). The site includes the entire Assessor's

- Block 4216, Lot 1, bounded on the west by Kansas Street, on the
- east by Rhode Island Street, on the south by 24th Street, and on the north by 23rd Street (see Exhibit 3, page 6).

C. Description

- The project would consist of 132 condominiums, 8,500 square feet of neighborhood-oriented commercial establishments and 161
- parking spaces. Ninety-five new condominiums would occupy 104,700 square feet on four levels (34,400 sq.ft. of site), and 34,980 square feet in existing buildings (5-story warehouse and garage) would be rehabilitated into 37 condominiums. The development costs of the project, including demolition, are estimated at \$14,700,000 as of March, 1981. Construction costs would be about \$10.2 million of the total (see Appendix A, page 120).

The project is in an RH-2 (House, Two-Family) district, containing predominantly two-family dwellings. Project sponsor would request a zoning reclassification to RM-2 (Mixed Residential, Moderate Density). The proposed project is within a 40 X Height and Bulk District, which limits development to a height of 40 feet and sets no bulk limits. These limits would not apply to the existing 60-foot warehouse.



Site Location

0 600'



Exhibit No. 2

Kansas St.

T

Courtyard

24th St.

23rd St.

Rhode Island St.

Existing Site

T - Transit Stop with exclusive loading area



— Sidewalk

— Existing Walls to be Retained

0 40'

— Building Line



Existing Structures to be Retained

Exhibit No. 3

The proposed project would consist of 4 stories of construction and parking and commercial development at the Kansas Street grade, below a first floor common to the entire project. The interior of the existing, approximately 60-foot building at Kansas and 24th Streets would be remodeled. The penthouse on this building would be removed. The 24th Street elevation of the project (Exhibit 6, page 10) shows the gradient along that side of the proposed project. Due to the site slope, there would actually be 3 different "first floors": on Kansas Street (the lowest); on 24th Street; and on Rhode Island Street (the highest). These differences in elevation, plus the nature of the surrounding development fronting each street, have resulted in different architectural treatments of the elevations.

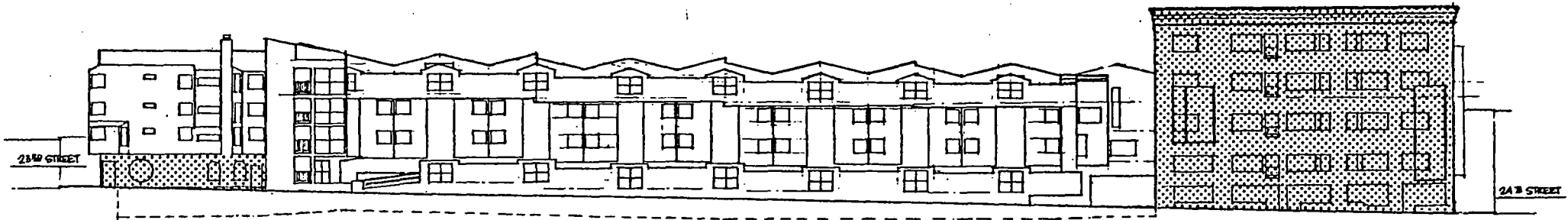
The project sponsor's first choice for the commercial space would be a grocery. The commercial space may be subdivided into 2 or 3 units. Tenants which would be considered include cleaners, laundromat, beauty parlor or neighborhood restaurant. Potentially disturbing uses such as a disco or bar would be excluded. The condominium agreements would include an indication that the commercial uses would be limited to neighborhood-oriented businesses which would not produce noise or fumes or otherwise interfere with the residential character of the project.

The Kansas Street side of the project would face the James Lick Freeway. This side of the project has been designed to minimize residents' exposure to the noise and air pollutants from the Freeway (Exhibit 13, page 20 shows proximity of project to Freeway). The Rhode Island Street side of the project (Exhibit 4, page 8) would front on a 2- to 3-story residential block. On 23rd Street (Exhibit 5, page 9) the project would face a ground floor grocery store with residential units and 3- to 4-story residential structures. On 24th Street (Exhibit 6, page 10) the project would face 2-story residential structures. Plans for each of the floors of the proposed development are shown in Exhibits 7-11, pages 11-15. Existing buildings to be retained are indicated on the elevations.

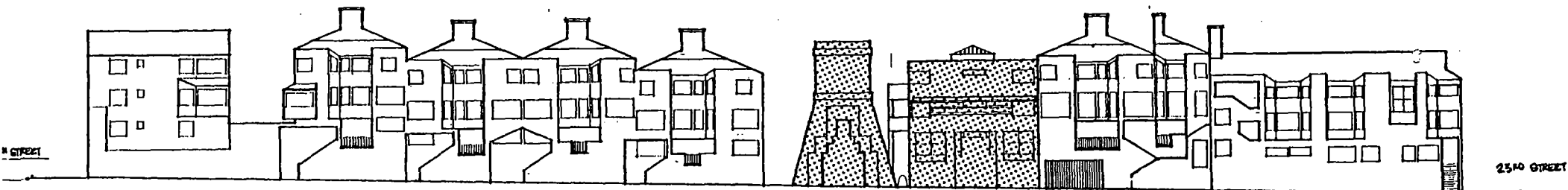
The building would be around the perimeter of the site, surrounding common open space which may include a swimming pool.

There are no landmarks, either designated or nominated, on the site.

Units would be in the mix of sizes and prices shown in Table 1, page 16.



Kansas Street



Rhode Island Street

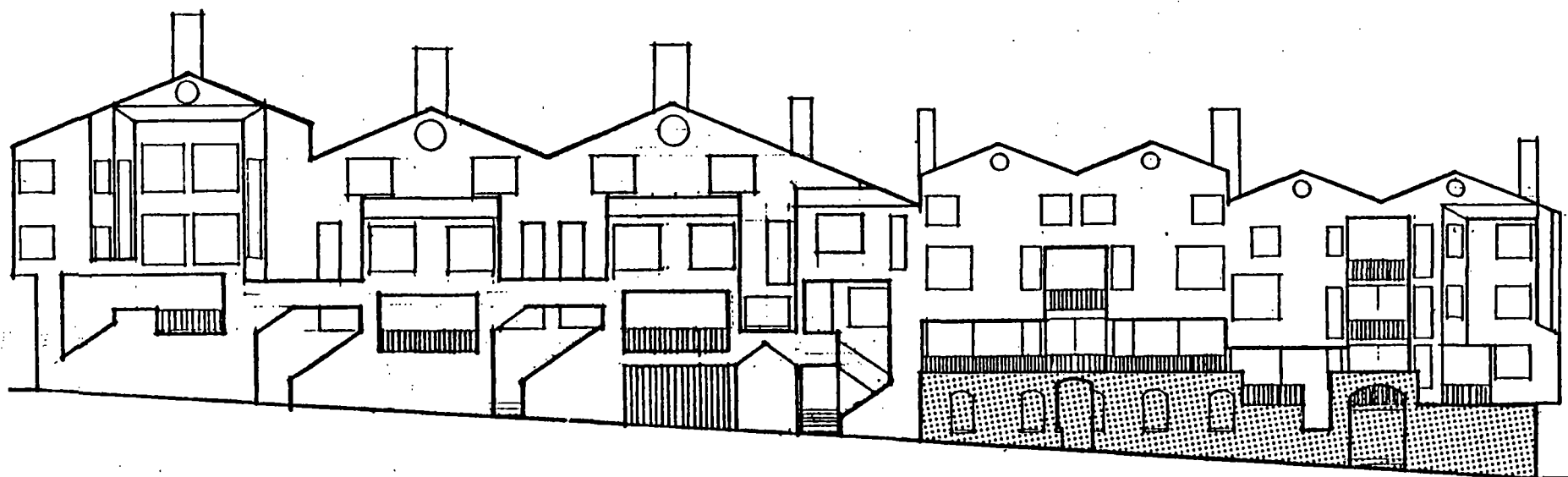
Elevations



existing areas to be retained

0 40'

Exhibit No.4



23rd St. Elevation

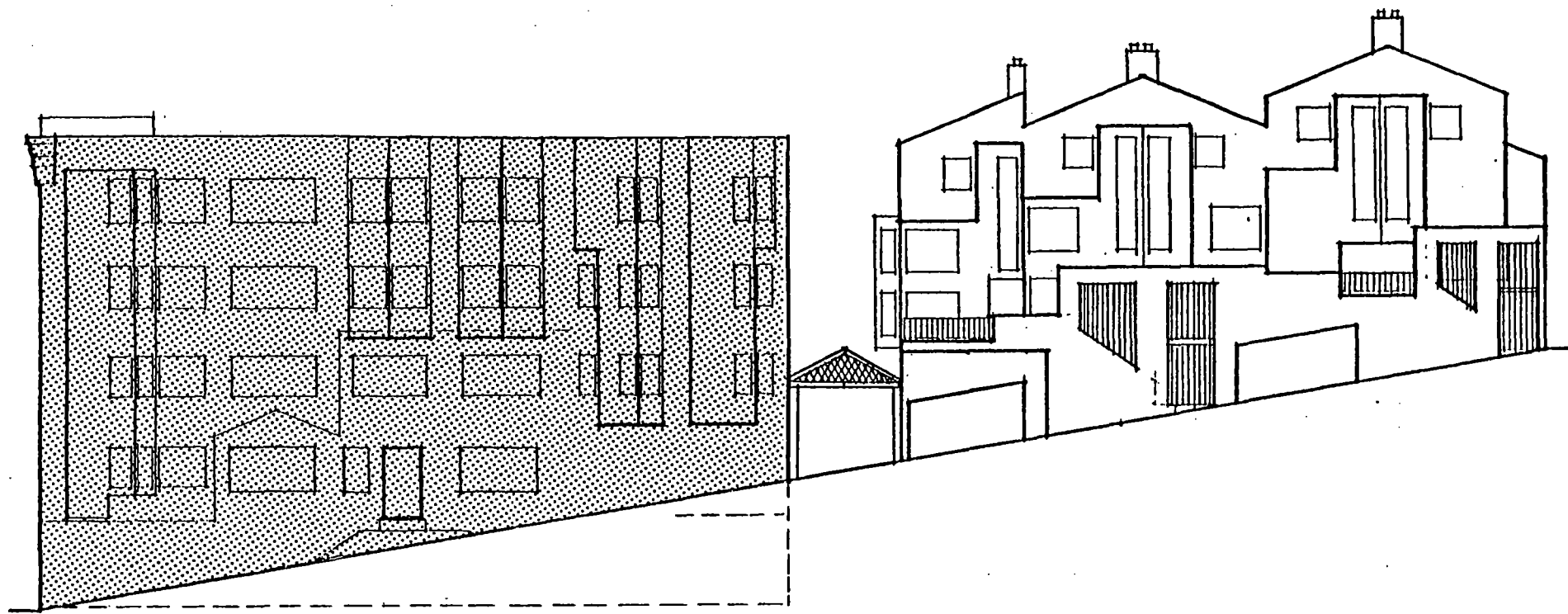


existing areas to be retained

0 20'

Exhibit No. 5

10



24th St. Elevation

 existing areas to be retained

0 20'

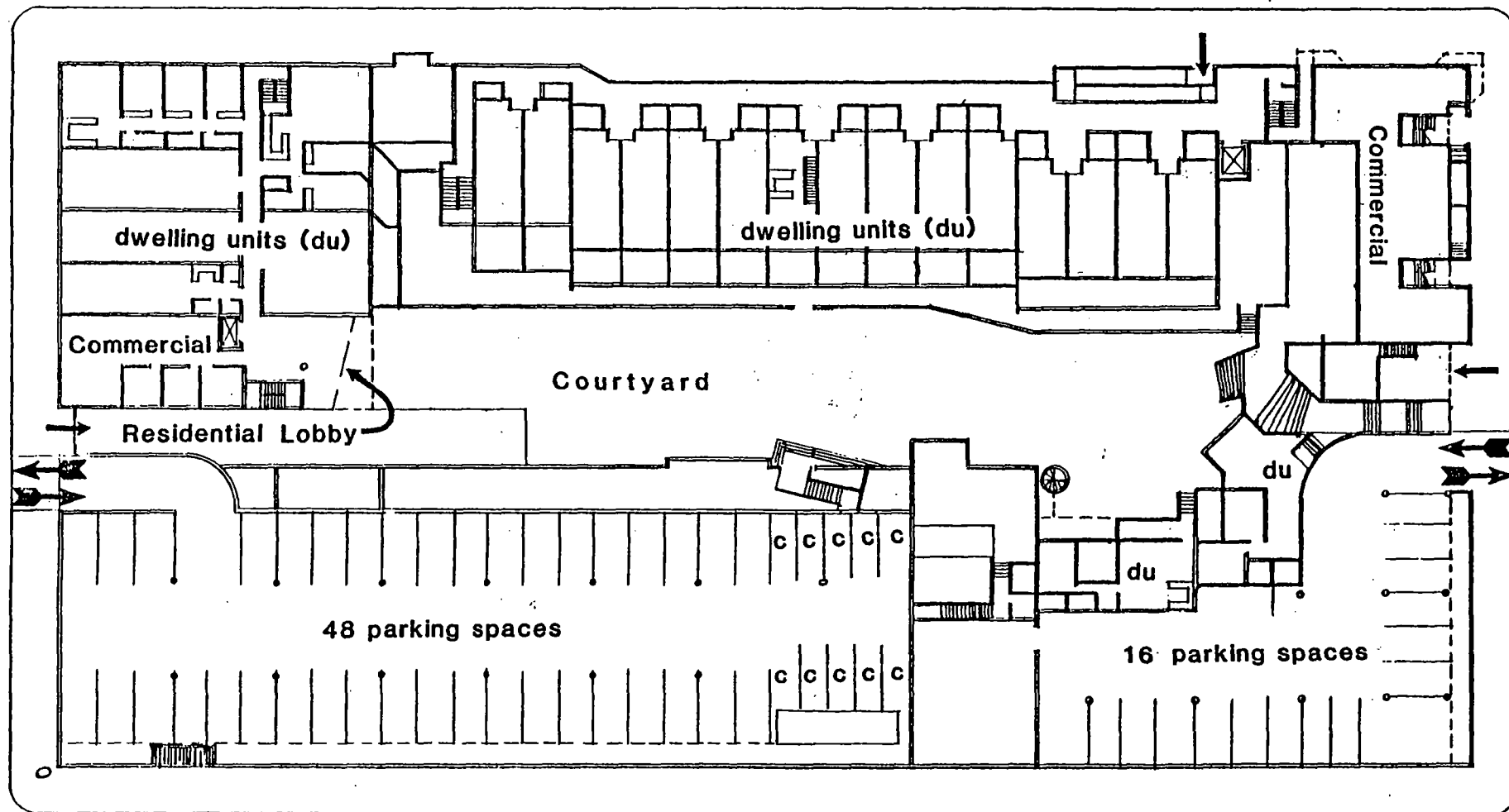
Exhibit No. 6

Kansas Street

23rd Street

24th Street

12



First Floor Plan

➡ auto entry

→ pedestrian entry

C - compact auto

0 45'

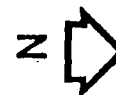
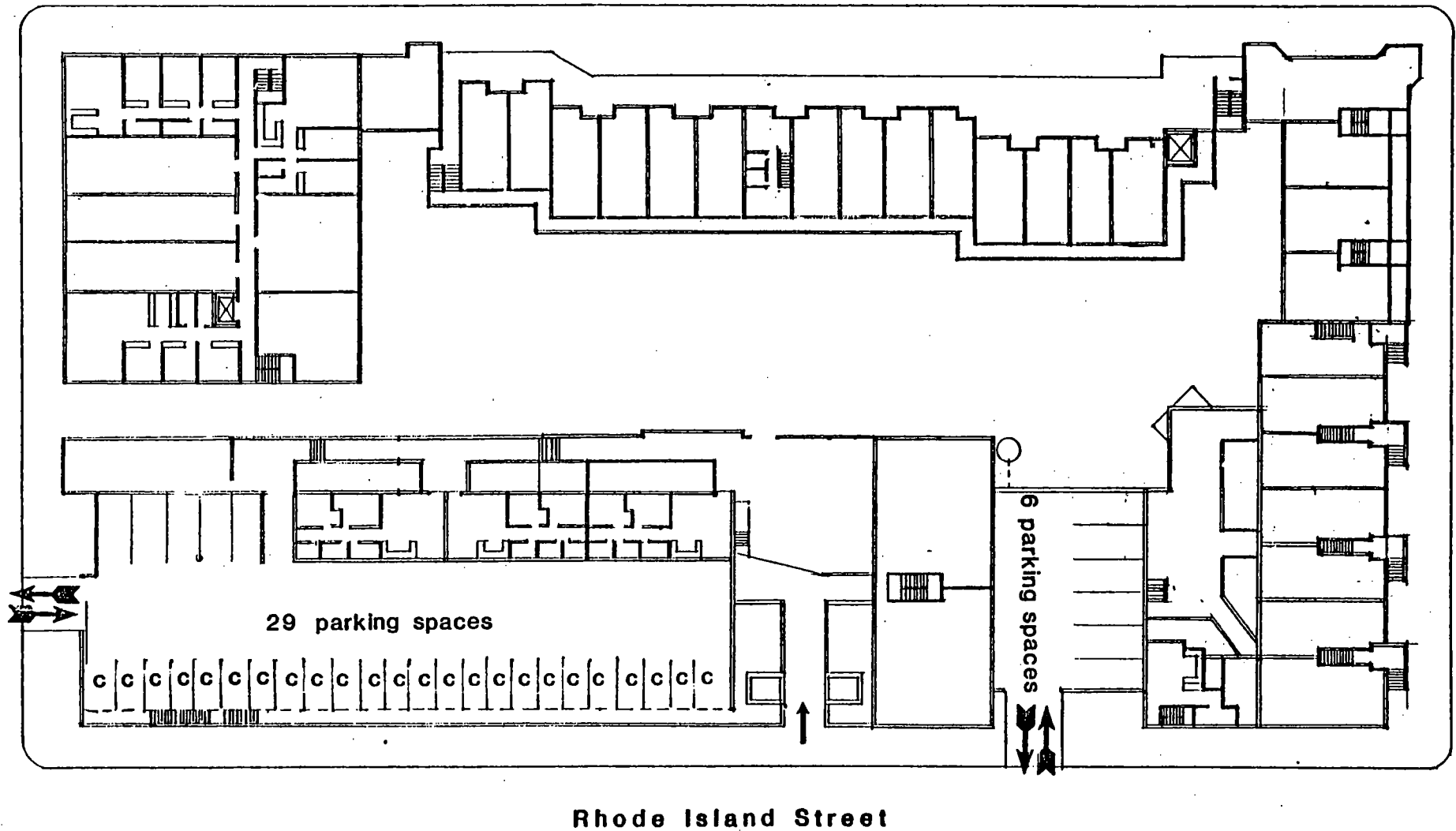


Exhibit No. 8

Kansas Street

24th Street

23rd Street



Second Floor Plan

➡ auto entry

➡ pedestrian entry

C - compact auto

0 45'



Exhibit No. 9

Kansas Street

24th Street

23rd Street

Rhode Island Street

Third Floor Plan

0 45'

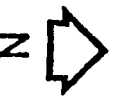
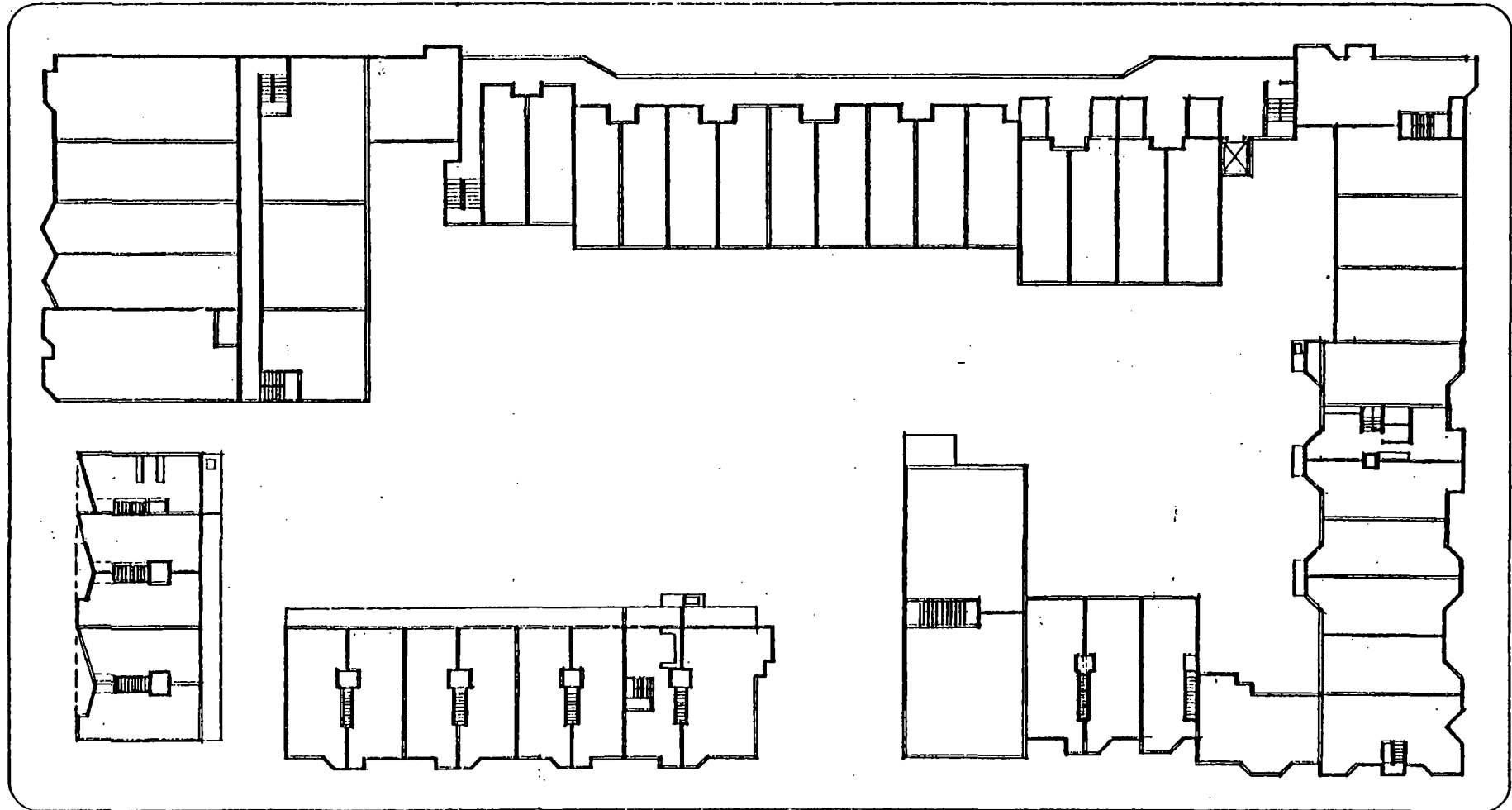


Exhibit No. 10

Kansas Street

24th Street

23rd Street



Rhode Island Street

Fourth Floor Plan

0 45'



Exhibit No. 11

TABLE 1. UNIT TYPES AND PRICES

Unit Types	No. of Units		Expected Prices (March 1981 Dollars)
	Market	Subsidized*	
Studios	13	1	\$ 99,000 - \$113,000**
One-Bedroom	29	3	\$ 71,000 - \$ 93,000
Two-Bedroom	81	8	\$ 99,000 - \$167,000
Three-Bedroom	9	1	\$172,000 - \$209,000
	<u>119</u>	<u>13</u>	
Total Units	132		

* 10% of the units would be subsidized if a subsidy is available; all units would be market-rate without subsidy. The maximum price for a subsidized unit would be about \$85,000, regardless of size. See further discussion of housing subsidies on pages 30 to 34.

** Prices of studio units would exceed prices of 1-bedroom units because the studio units would be larger.

The proposed project would take 21 months to complete, from the time building permits are issued. Demolition would take approximately 3 months. New construction and initiation of rehabilitation would take approximately 15 months. Completion of rehabilitation and remodeling would take approximately 3 months.

D. Required Project Approvals

Certification of the Final Environmental Impact Report by the City Planning Commission is required before any other approval actions may take place. The main project approval action would be zoning reclassification and the Conditional Use Authorization.

Zoning reclassification from RH-2 (Residential Two-Family District) to RM-2 (Residential, Mixed District, Two-Family) would be required for the housing density proposed. Approval of a

zoning change requires a public hearing and approval by the Planning Commission and adoption by the Board of supervisors, pursuant to Section 302 of the City Planning code.

The project is proposed for Conditional Use authorization (approvable by the City Planning Commission) as a Planned Unit Development (PUD), under the provisions of Sections 303 and 304 of the Planning Code.. According to the Code, PUD procedures

"are intended for projects on sites of considerable size, developed as integrated units and designed to produce an environment of stable and desirable character which will benefit the occupants, the neighborhood and the city as a whole. In cases of outstanding overall design, complementary to the design and values of the surrounding area, such a project may merit a well reasoned modification of certain of the provisions contained elsewhere in this Code." (Section 304(a)) A PUD must meet the criteria for Conditional Uses in Section 303(c) and elsewhere in the Planning Code. In addition, it must promote applicable objectives of the Master Plan, provide adequate off-street parking and usable open space at least equivalent to Code required open space, and meet other requirements of Planning Code Section 304(d). The project's proposed commercial space also requires Conditional Use approval for a new non-residential use in an RM district. This approval would be sought as part of the Conditional Use process for the PUD. Conditional Use approval may be appealed to the Board of Supervisors.

The project must obtain approval as a condominium subdivision, requiring a finding by the Planning Commission that the project would be in conformity with the City's Master Plan (San Francisco Subdivision Code, Section 1332) and approval by the Department of Public Works.

Subdivisions of 50 or more units must provide a minimum of 10% low and moderate income housing, as defined in Section 1341(c) of the San Francisco Subdivision code, unless the Planning Commission finds that public subsidies are not available (Section 1341(a)).

Notes: Project Description

1. Both are located at 300 Montgomery Street, San Francisco, California, 94104.

III. ENVIRONMENTAL SETTING

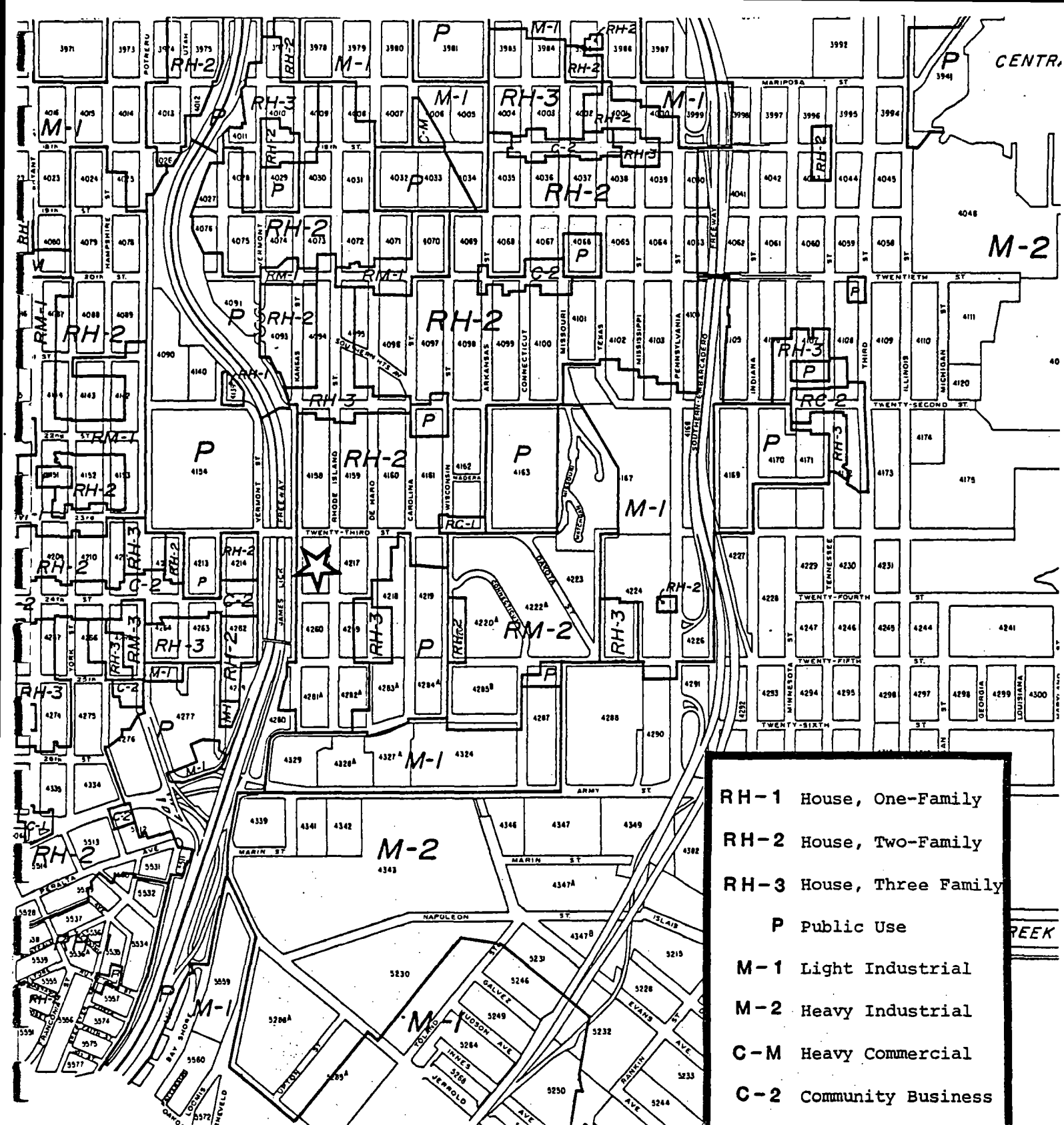
A. Land Use and Zoning

The project block is surrounded on 3 sides by an RH-2 (House, Two-Family) zoning district; two-family homes predominate. To the west is the James Lick Freeway, see Exhibit 12, page 19. With the exception of a grocery store, beneath 6 residential units, on the northeast corner of Kansas and 23rd Sts., a possible industrial use in a duplex on Kansas St. in the block north of the site (posted with warning and requirements for special clothing), and the Freeway both of which are shown in Exhibit 13 (page 20), surrounding land use on the east side of the Freeway is residential. Exhibit 14 (page 21) shows the land uses surrounding the site.

The neighborhood is predominantly made up of 2- and 3-story row houses (Exhibit 15, page 22). Eucalyptus trees line the western edge of Kansas Street along the right-of-way of U.S. 101 (James Lick Freeway), which is approximately 100 feet from the project site. San Francisco General Hospital is approximately 400 feet from the site across the Freeway.

The site contains a complex of 16 structures. The largest building, the warehouse structure, which would be retained, occupies the southwest corner of the site at 24th and Kansas Streets (see Exhibit 6, page 10). Other structures to be retained are the garage, chimney and retaining walls on Rhode Island and the first floor brick wall at the corner of 23rd and Kansas Streets, as shown on Exhibits 4 and 5, pages 8-9.

The so-called Wisconsin Street Housing Site, in the area generally between DeHaro, 23rd, Wisconsin, and 26th Streets, has been proposed for development for many years by various sponsors. The site was used for World War II housing which was demolished and cleared in the 1960's. Exhibit 16 (page 23) shows the relationship of the Wisconsin Street Site to the proposed project. The closest part of the Wisconsin site, at DeHaro and



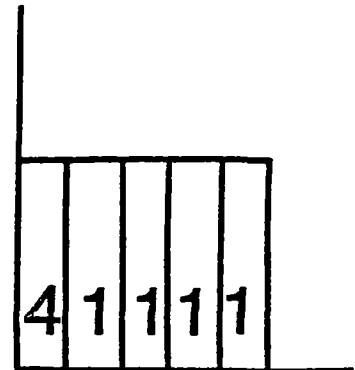
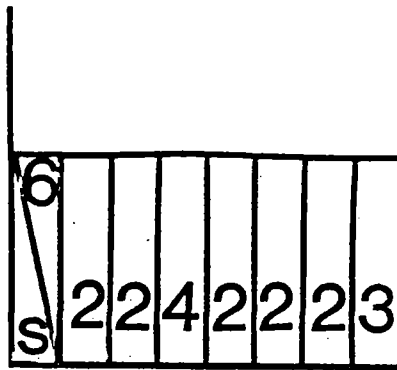
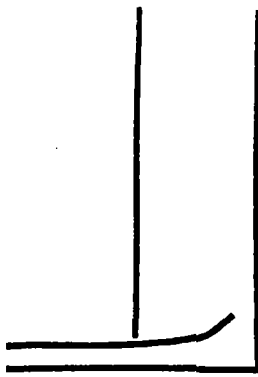
project site



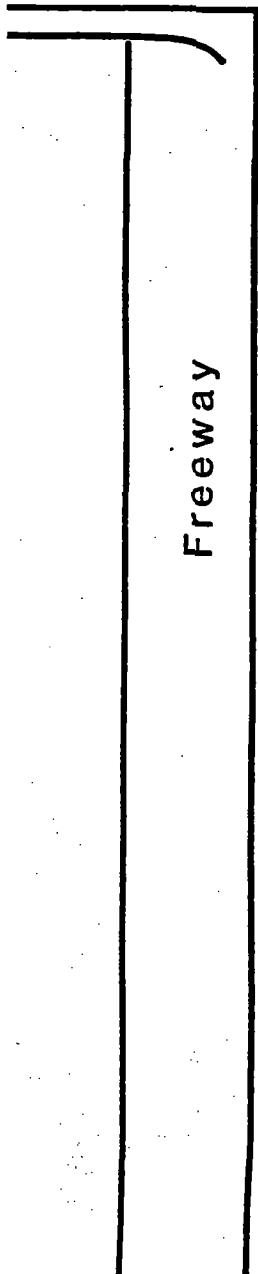
View showing distance between site and freeway.



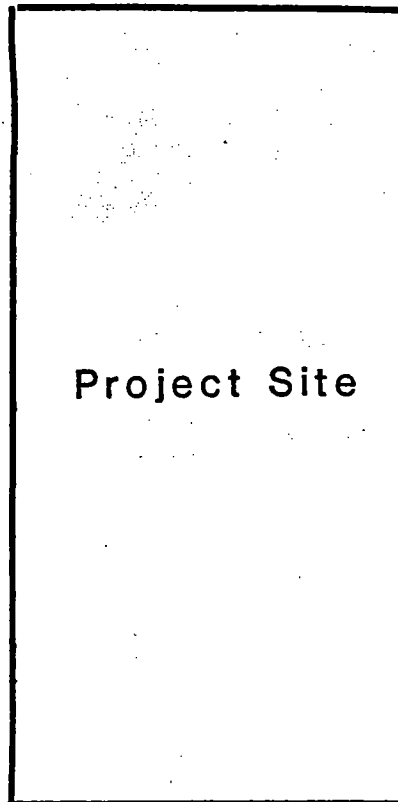
View from site of Kansas St. and 23rd St. looking north.



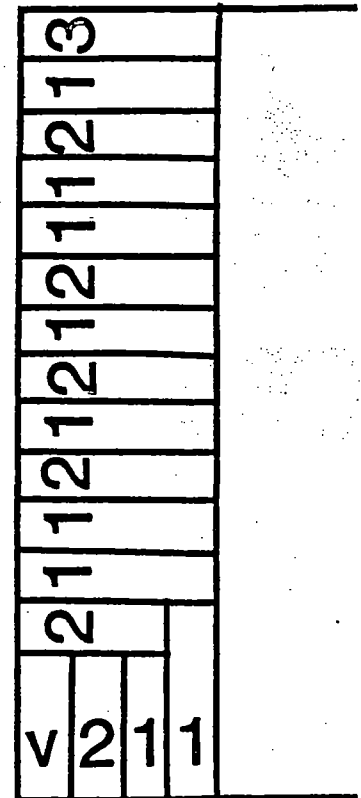
23rd Street



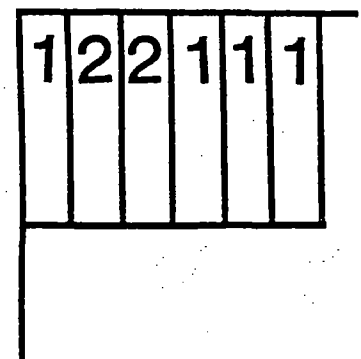
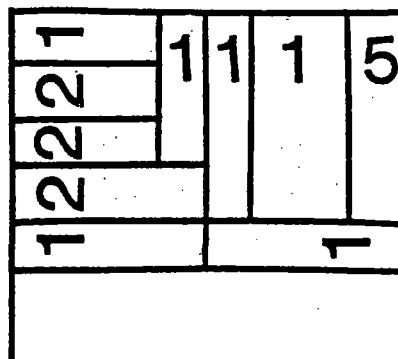
Kansas Street



Rhode Island Street



24th Street



Existing Land Use

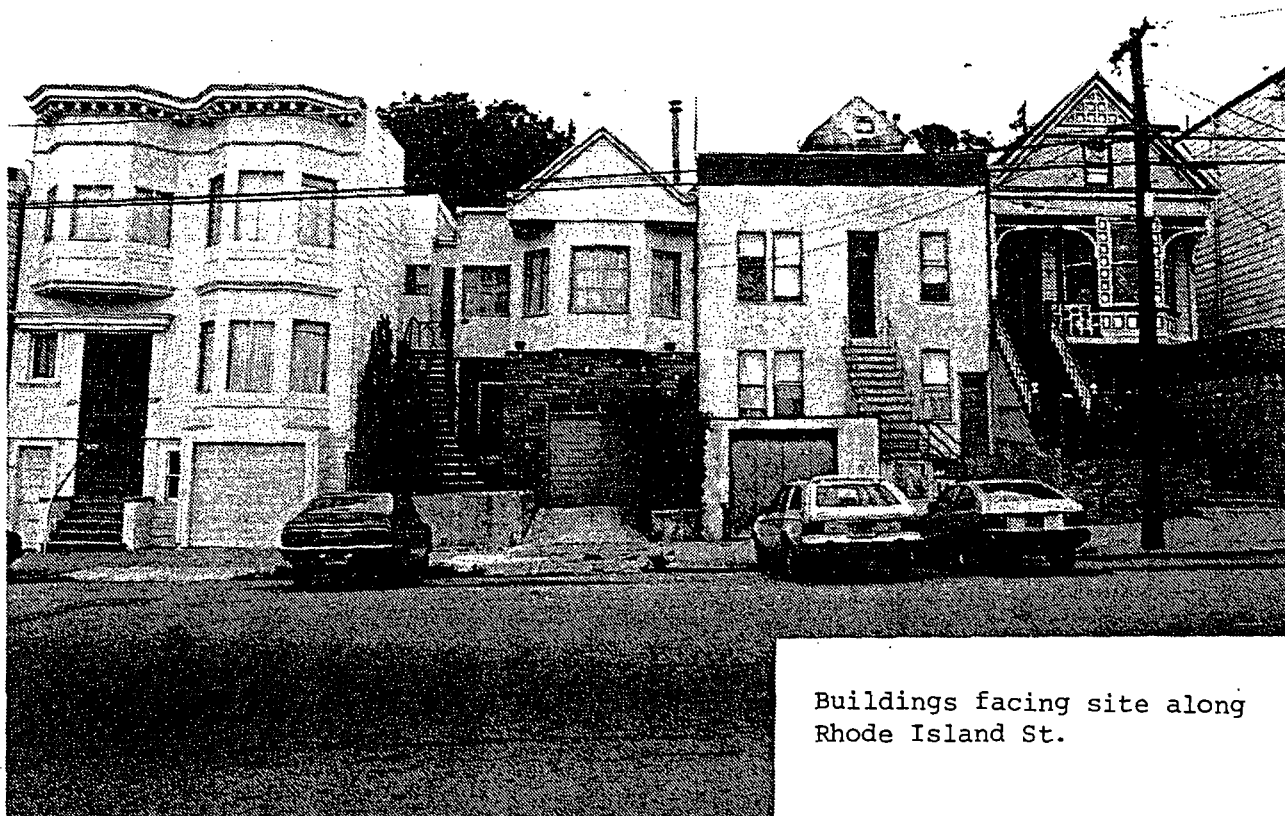
Numbers represent the number of units per lot

Not to scale

V Vacant

S Store

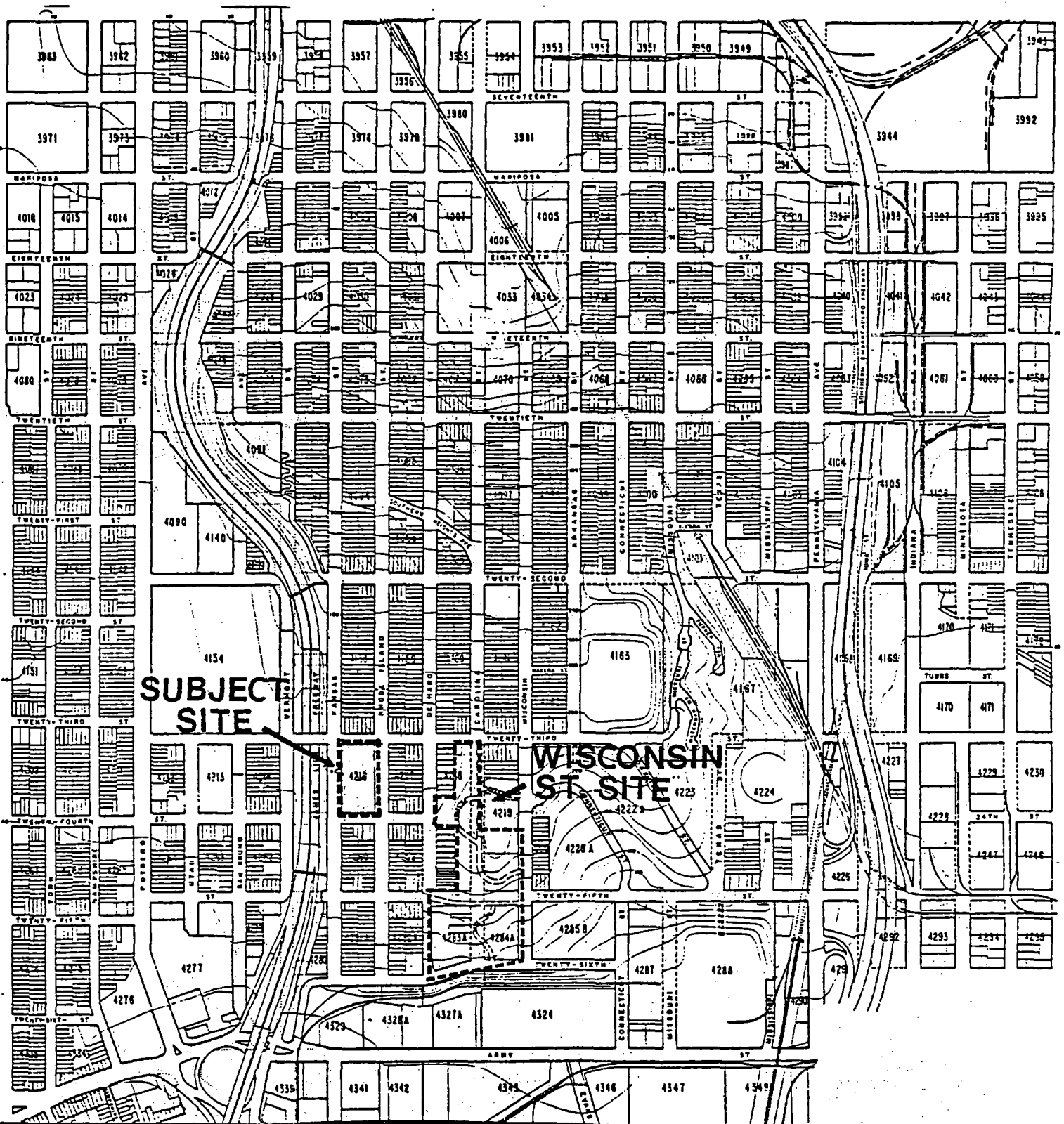




Buildings facing site along
Rhode Island St.



Buildings facing site along
23rd St.



SUBJECT SITE

WISCONSIN ST. SITE

Wisconsin Street Site



0 600'

Exhibit No. 16

24th Streets, is a block away. The Potrero Hill Neighborhood Improvement Plan recommends development of 175 family units, "including a substantial amount of dwelling units for lower income households"¹ for the Wisconsin site. In February 1981 the Board of Supervisors initiated a proposal to rezone the property from P (Public) to RH-2; environmental review, City Planning Commission approval and Board adoption are expected to occur during 1981. There is no presently active development proposal for this site.

City Planning files indicate several other recent or proposed projects in the vicinity of the proposed project. In 1978 an apartment project, one half block from the proposed project, was completed at 2120 24th Street and 3 duplexes were completed at 205-207 Arkansas Street, 9 blocks northeast of the proposed project. Three warehouse buildings have been proposed for 1453 25th Street, 7 blocks east of the project. (Building Permit Application Number 7812869 and Office of Environmental Review Case Number EE 78.420).

The nearest RM-2 (Residential, Mixed District, Moderate Density) zoning, is 3 blocks from the site, east of Wisconsin Street. RH-3 (Residential, House, Three-Family) Districts are a block north and a block southeast of this site. A small RC-1 (Residential, Commercial Combined, Low Density) area is 3 blocks east at 23rd and Wisconsin, adjacent to the RM-2 area. A C-2 (Community Business) district extends along 24th Street, west of the Freeway and M-1 (Light Industrial) districts are found about 2400 feet east and 2 blocks south of the site. Although there is a mix of zoning and land use in the area, the site is surrounded by residential uses.

Notes: Land Use and Zoning

1. San Francisco Department of City Planning, Potrero Hill Neighborhood Improvement Plan, endorsed by the Planning Commission, 3 August 1978, Resolution 8036, page 14.

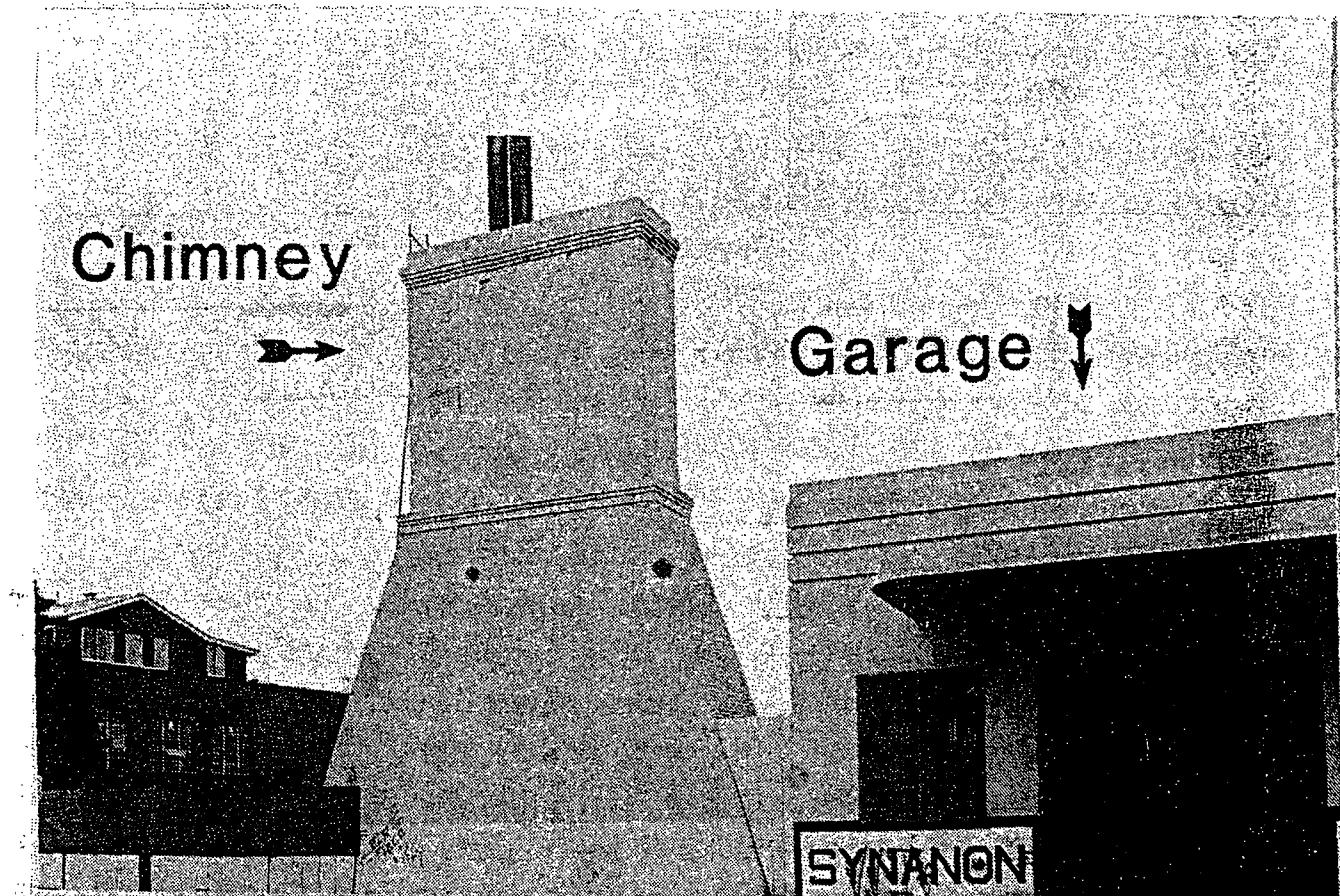
B. History of the Site

The San Francisco Pioneer Varnish Works, owned by the Hueter Bros. & Co. (Gustave and Ernest L. Hueter), dealers in paints, oils, and artists' materials, was established in 1858. Hackett (1884) states that the factory "is located on Sonoma¹ Street, between Twenty-third and Twenty-fourth Streets, and covers one city block with its buildings and accessions, erected after the latest European plans... The trade of this house is very great, extending so far as Sydney and Melbourne. At the World's Fair in 1879, at Sydney, its varnishes were awarded the highest premiums."² A chimney built as part of the paint manufacturing plant would be retained in the proposed project (Exhibit 17, page 26). It is listed in the San Francisco Department of City Planning's 1976 Architectural Survey, an inventory of structures of architectural significance. The chimney is rated "3" in this inventory.³

In 1906 the northern half of the site was owned by the Hueter Bros. and the southern half was owned by E. L. Hueter and J. J. Wentworth.⁴ The warehouse at 24th and Kansas Streets, which would be retained in the proposed project, was designed by W. H. Ellison, Consulting Engineer, then of 369 Pine Street in San Francisco and was built by Barrett and Hilp in the twenties.⁵

National Lead Company (Dutch Boy, Inc.) purchased the site in 1930 and continued paint manufacture until the site was acquired by the private Synanon organization in 1971. Synanon Inc. used the site as San Francisco work headquarters and residential facility. Synanon facilities included various workshops, printshops, automotive repair shops and other work areas. Synanon sold the site to the project applicant in early 1980. There is currently no authorized activity on the site.

Prior to the present RH-2 zoning the site was zoned R-3 which permitted one dwelling unit per 800 square feet of lot. Under R-3 zoning 100 units could have been built on the site. The paint manufacturing plant was a nonconforming use with a 2 May 1980 termination date.



Chimney and Garage to be Retained

Notes: History of the Site

1. Street names and some street alignments changed in this area about the turn of the century. It is not certain whether this refers to the present site or a block further east.

2. Hackett, Fred, H., editor, Industries of San Francisco, Payot, Upham & Co., Publishers, San Francisco, 1884, pp. 122-3 (Available at San Francisco Public Library).

3. Jonathan Malone, Administrative Assistant, Landmarks Preservation Advisory Board, personal communication, 21 January 1981. Each structure is numerically rated according to its overall architectural significance. The ratings range from a low of "0" to a high of "5". Factors considered include architectural significance, urban design context, and overall environmental significance. The architectural survey resulted in a listing of the best 10% of San Francisco's buildings.

4. The Hicks-Judd Company, The San Francisco Block Book, 4th Edition, 1906. (Available at San Francisco Public Library.)

5. San Francisco Department of Public Works, Central Permit Bureau, Building Permit filed 23 April 1923.

C. Transportation

- Street Characteristics. Major thoroughfares¹ nearest the site are Potrero Ave., 4 blocks west, and Army St., 3 blocks south. The site is adjacent to the James Lick Freeway (U.S. 101) with connections north and south at Army St., about 1000 feet south of
- the site. The connection from the south does not allow left
 - turns from Army St. onto Vermont St. Therefore, freeway access from the south is more convenient at Mariposa St., from the Vermont St. exit 5 blocks north of the site, or from the Army St. exit (west to Potrero Ave., north on Potrero, and east on 23rd St. to the site).

The characteristics of surrounding streets are given in Table 2.

TABLE 2: STREET CHARACTERISTICS

Street	Right of Way	Travel Lanes	Parking Lanes	Sidewalks
23rd St.	66'	2 @ 12'	2 @ 9'	Both sides, 12'
Rhode Island St.	80'	2 @ 15'	2 @ 10'	Both sides, 15'
24th St.	66'	2 @ 12'	2 @ 9'	Both sides, 12'
Kansas St.	80'	2 @ 15'	2 @ 10'	West side, 5' East side, 15'

Traffic volume on 23rd St. is about 3070 vehicles per day,² on Rhode Island St. about 750 vehicles per day, on 24th St. about 100 vehicles per day and on Kansas St. about 2100 vehicles per day.³

There are 103 on-street parking spaces on the streets bounding the project. There are an additional 277 spaces within one block of the site on streets radiating from the project corners. During counts by Bendix Environmental Research, Inc. on 12 May 1981, 66 or 64% of the perimeter spaces were filled and 153 or 55% of the spaces on radiating streets were filled. Few cars were observed parking or leaving during the 3-6 pm period.

The nearest signalized intersection is at 23rd and Potrero Sts., 4 blocks west, which operates at level of service C or better in the evening peak hour.⁶

There are no transit preferential lanes on any of the streets surrounding the site.

Transit. Four MUNI bus routes run adjacent to or near the site: 53-Southern Heights, 35-Eureka, 19-Polk and 47-Van Ness (see Exhibit 19, page 31). The 19-Polk and 35-Eureka lines cross over the James Lick Freeway on the 23rd St. overpass, an entry route to the Potrero Hill area.

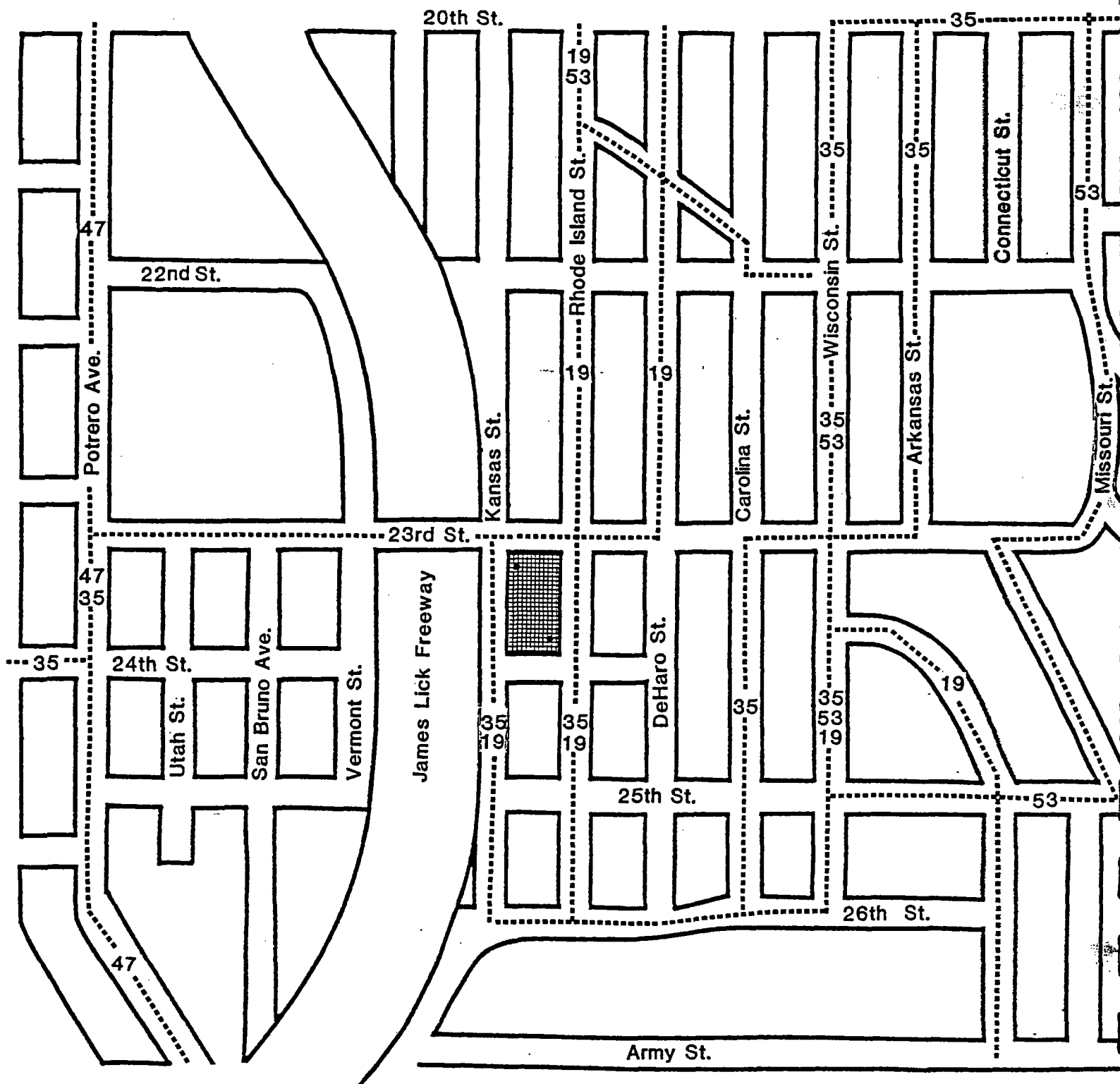
Pedestrians. Pedestrian volume on the sidewalks surrounding the site are relatively low. The highest volumes occur at the corner of 23rd and Kansas during the peak (5:00 - 6:00 p.m.) hour.⁷ Pedestrian movement is at a level of service A (less than 60 pedestrians per hour on 23rd and 24th Sts. and less than 75 pedestrians per hour on Kansas and Rhode Island Sts).⁸

Bicycles. The Transportation Element of the Comprehensive Plan designates no streets surrounding the site as bicycle routes. The closest designated route is on Bryant St., 7 blocks west.

Parking. Except for the facilities at San Francisco General Hospital, a block from the site across the Freeway, there are no off-street parking lots within 1/4 mile of the site. There are no special loading zones on any of the streets surrounding the project except for a bus stop on Kansas at 23rd as shown on

Exhibit 3, page 6.

There are 103 on-street parking spaces on the streets bounding the project. There are an additional 277 spaces within one block of the site on streets radiating from the project corners. During counts by Bendix Environmental Research, Inc. on 12 May 1981, 66 or 64% of the perimeter spaces were filled and 153 or 55% of the spaces on radiating street were filled. Few cars were observed parking or leaving during the 3-6 p.m. period.



Transit Service

....19.... MUNI Bus Routes



Project Site

• Bus Stop

Not to scale

Exhibit No. 19

These parking spaces are currently used by neighbors or by commuters, primarily San Francisco General Hospital employees. For all streets surrounding the site, parking occupancy averages approximately 50%, ranging from 90% on Kansas St. to 10% on Rhode Island St.⁹ Field observation of drivers using local parking spaces indicate that approximately 50% of daytime users are generated by San Francisco General Hospital (SFGH) (8:00 a.m. - 6:00 p.m.) and approximately 20% are generated by SFGH in the evening hours.⁹

Notes: Transportation

1. Major Thoroughfare: A cross-town street whose primary function is to link districts within the City and to distribute traffic from and to the freeways; a route generally of citywide significance; as identified in the Thoroughfare Plan of the Transportation Element of the San Francisco Comprehensive Plan.

2. This may be compared to a traffic count taken on 5 October 1976 at the intersection of 23rd and Vermont Streets. Increasing the 1976 traffic count by 2% per year per information from Nelson Wong, San Francisco Department of Public Works, Traffic Engineering Division, telephone conversation, 29 January 1981, traffic at that intersection would be expected to be 5700 vehicles per day.

3. EIR Consultants, Ted Kreines, and Richard K. Hopper, P.E., field observations, 4 February 1981. Traffic counts on these 4 streets were taken for the evening peak hours (4:15 to 5:15 p.m.). This evening peak hour is assumed to be 10% of the total daily traffic. This assumption is based on data from the San Francisco Department of Public Works, Traffic Engineering Division, Map, Evening Peak Hour Traffic Flow on Principal Streets and Highways, 1974-1976 and Map, Twenty-Four Hour Traffic Flow on Principal Streets and Highways, 1974-1976.

4. Calculation method from: Institute of Transportation Studies, "Fundamentals of Traffic Engineering," 8th Edition, 1973, p. 7-7.
5. EIR Consultant, Ted Kreines, field observation, 4 February 1981.
6. Scott Shoaf, San Francisco Department of Public Works, Traffic Engineering Division, telephone conversation, 3 July 1980 and reference 4 above.
7. 1.3 pedestrians per minute: field observation by Ted Kreines, 4 February 1980.
8. "Pedestrian Planning & Design," John J. Fruin, Metropolitan Association of Urban Designers & Environmental Planners, Inc., New York, 1971, p. 78.
9. EIR Consultants Richard K. Hopper, P.E., 7 July and 15 July 1980 and Ted Kreines, 4 February 1981.

D. Noise

Acoustical measurements were taken at three locations (shown on site map, Exhibit 20, page 34) to quantify existing noise conditions at the site area:¹ on Kansas Street approximately 100 feet from the near lane of traffic on Route 101; in the courtyard in the center of the existing building complex on the site; and on the west side of Rhode Island Street between 23rd and 24th Streets. The three positions were chosen as representative of the noise environment of the block: noise levels at point 1 represent exposure of project units which would front toward the Freeway; point 2 represents levels within the proposed courtyard; and point 3 represents noise exposure of the nearby residential area and units which would front on Rhode Island. A summary of the noise measurements is given in Table 3 (page 35). The noise

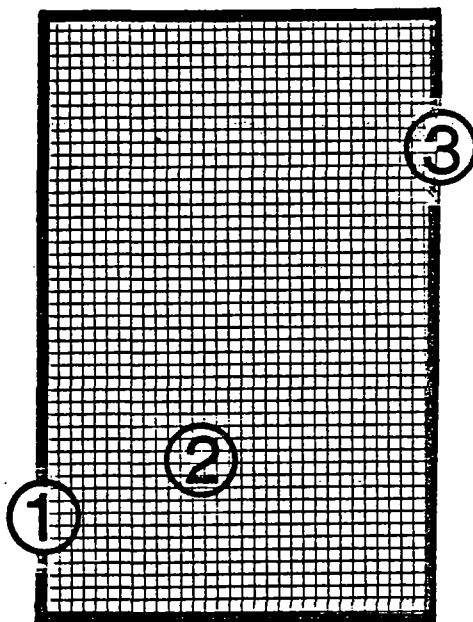
Freeway

Kansas St.

Rhode Island St.

23rd St.

24th St.



Noise Measurement Positions



Project Site



Source: Charles M. Salter Associates, Inc.

Exhibit No. 20

TABLE 3: AMBIENT NOISE MEASUREMENTS

Location of Measurement	Day and Time	<u>L₁</u>	<u>L₁₀</u>	<u>L₅₀</u>	<u>L₉₀</u>	<u>L₉₉</u>	<u>L_{eq}</u>	Comments
Site 1. On Kansas Street, 60 feet from building corner at 24th Street, on 3rd Floor of building, 1 meter from facade, 100 feet to nearest lane of freeway.	18 July 1980 5:10-5:20 pm	79	77	76	74	74	76	8-lane freeway depressed 20 feet below grade.
Site 2. In courtyard 120 feet from building edge at 24th Street and 120 feet from building edge at Kansas Street, 2 meters from ground.	18 July 1980 5:30 pm	--	57	57	55	--	56	Steady noise from freeway through gate/entry on Kansas Street
Site 3. Near curb toward Rhode Island Street 60 feet from 24th Street building edge, 15 feet from building facade.	18 July 1980 5:50 pm	85	69	60	56	--	70	5 minute sample with bus.
		--	64	60	58	--	61	5 minute sample without bus.

The L_{10} , L_{50} and L_{90} are statistical descriptors indicating the noise levels which were exceeded 10, 50 and 90 percent of the time period, respectively. The L_{eq} is the equivalent sound level and is an alternative method for describing the average noise level.

-- No measure taken.

Source: Charles M. Salter Associates, Inc.

environment is dominated by noise from eight lanes of freeway traffic, and by bus traffic noise on Rhode Island, 23rd and 24th Streets. The acoustical consultant characterizes the area as "generally noisy."²

The Environmental Protection Element of the Master Plan predicts a background noise level of 65 L_{dn} ³ for this site. Actual measurements showed the site to be noisier on Kansas Street, estimated at 75 L_{dn} ⁴ on the basis of short-term measurements, because this side of the site is next to the Freeway. In the courtyard the L_{dn} drops to about 55-60 dBA; on the Rhode Island side it is 60-65 dBA, with peak noise at 85 dBA when buses pass by.⁵

Notes: Noise

1. Measurements made by Charles M. Salter Associates, Inc., under contract to EIR consultant Kreines and Kreines.

2. Acoustical Consulting Report for 2222 Limited EIR, Charles M. Salter Associates, Inc., 28 August 1980. Available for public review at the City Planning Office of Environmental Review, 45 Hyde Street, Room 319.

3. Decibel: A logarithmic unit of sound energy intensity. Sound waves, traveling outward from a source, exert a force known as sound pressure level (commonly called "sound level"), measured in decibels.

dBA: Decibel corrected for the variation in frequency response of the typical human ear at commonly-encountered noise levels.

L_{dn} : An averaged sound level measurement, based on human reaction to cumulative noise exposure over a 24-hour period, which takes into account the greater annoyance of nighttime noises. Noise

between 10 p.m. and 7 a.m. is weighted 10 dBA higher than daytime noise.

4. For the purposes of this report L_{dn} has been considered to be equivalent to CNEL. CNEL = Community Noise Equivalent Level; similar to L_{dn} except that sound level measurements taken between 7 p.m. and 10 p.m. are weighted 5 dBA higher than daytime sounds in addition to the 10 dBA 10 p.m. to 7 a.m. weighting.

5. L_1 : 85 dBA, the noise level exceeded during the 1% noisiest time.

E. Topography and Geology

The site is bounded by 4 streets with varying slopes: 24th Street has a slope of 13%; 23rd Street has a slope of 7%; Kansas Street has a slope of 4%; and Rhode Island Street has a slope of 1%.

The site has a cross-slope of 5.2%, measured from the northwest to southeast corners, representing a grade change of 24 feet within a distance of 452 feet.

The site slopes down to the west at a ratio of approximately 6 horizontal to 2 vertical (6:1). Borings drilled by the soils engineer¹ indicate that the site is generally underlain by 2 to 10 feet of fill. Fifteen feet of sand fill were found on the east side of the site. Under the fill is clay, sand, and gravel; below these are shale and serpentine rock. Groundwater level is below the level of the borings.

The fill would not provide adequate foundation support, and so would have to be removed down to the natural soil level, to provide a suitable base for project building foundations.

The San Andreas, Hayward, and Calaveras earthquake faults are 7 miles southwest and 12 and 20 miles northeast of the site,

respectively.² The soils on the site are not subject to liquefaction³ or settlement in case of an earthquake.

Notes: Topography and Geology

1. This section is based on the 17 November 1980 report by Warren Wong (California license No. CE 25777), Geo/Resource Consultants for project sponsor: "Geotechnical Investigation, Proposed Potrero Hill Housing Development, 24th and Kansas Streets, San Francisco, California."
2. A map showing the location of these faults with respect to San Francisco can be found on page 48 of Final EIR EE 79.57, Daon Building, San Francisco City Planning Commission, 12 June 1980, and is hereby incorporated by reference. That EIR is available for public review at the Department of City Planning, Office of Environmental Review, 45 Hyde Street, Room 319.
3. Liquefaction: Earthquake-induced transformation of a stable granular material, such as sand, into a fluidlike state, similar to quicksand.

F. Plants

The site is urbanized. Three, 8-inch diameter eucalyptus trees, are growing on the site along the Rhode Island Street wood fence. There are 7 street trees in sidewalk planters along 24th Street, and one in a sidewalk planter on 23rd Street.

IV. ENVIRONMENTAL IMPACT OF THE PROPOSED PROJECT

A. Land Use and Zoning

Rezoning would be required in order to permit the proposed 132 units on this site. Table 4 shows the density which could be permitted by various zoning districts on this 80,000-square-foot site. Present RH-2 zoning would permit 53 units, and RM-2 (proposed) or RC-2 zoning would permit 133 units. Thus, the project would include 80 more dwelling units than presently allowable. RM districts allow more variety of building sizes and designs than RH districts. According to Planning Code Section 206.2, RM districts "...are intended to recognize, protect, conserve and enhance areas characterized by a mixture of houses and apartment buildings, covering a range of densities and building forms...and contain supporting non-residential uses." New non-residential uses in RM districts are permitted with conditional use authorization. RC districts are characterized by structures combining residential and first floor, neighborhood-serving commercial uses, with less of a rear yard requirement than comparable RM districts. The proposed project would have residential units over commercial space. As the housing over a grocery on the north side of Kansas and 23rd is the only other such arrangement in the immediate neighborhood, RC zoning would not be as likely to be recommended or approved as would RM zoning. Project sponsor proposes to apply for RM-2 zoning with a conditional use authorization for the commercial space. Some of the units would have private terraces.

RM-2 districts require 80 square feet per unit of private usable open space, or 107 square feet of common usable open space per unit. The project would provide 29,160 square feet of common usable open space, or about 175 square feet per unit.

New construction would comply with the 40-foot height limit. The sponsor originally proposed to renovate the penthouses on top of the building at 24rd and Kansas Streets. No construction permit appears to have been issued for these penthouses. As they were constructed without a permit, they must be demolished rather than renovated. The main portion of the building, about 60 feet tall on the Kansas Street frontage, was constructed pursuant to a 1923 building permit application and, therefore, present height limits do not apply.

TABLE 4. ALLOWABLE HOUSING DENSITY BY ZONING DISTRICT

District	Required sq. ft. per unit ¹	Maximum number of units
RH-2, Residential, House District, Two Family (present zoning)	1500 ²	53
RH-2, P.U.D. ³	up to 1000 minus 1 unit	79
RH-3, Residential, House District, Three Family	1000 ¹	80
RM-1, Residential Mixed District, Low Density	800	100
RC-1, Residential-Commercial Combined District, Low Density	800	100
RC-2, Residential-Commercial Combined District, Moderate Density	600	133
RM-2, Residential Mixed District, Moderate Density (proposed zoning)	600	133
RM-2, P.U.D. ³	up to 400 minus 1 unit	199
RC-3, Residential-Commercial Combined District, Medium Density	400	200
RM-3, Residential Mixed District, High Density	400	200
RM-3, P.U.D. ³	up to 200 minus 1 unit	399

¹ There are 80,000 square feet in the proposed site.

² Development at this density requires conditional use permit.

³ P.U.D. = Planned Unit Development, requiring conditional use permit.

B. Historic Structure

The chimney, described on page 25, would be retained as a symbol of the long history (over 100 years) of industrial use of the site.

C. San Francisco Comprehensive Plan and Other City Policies

This EIR section compares the proposed project with the Residence and Urban Design elements of the San Francisco Master Plan. Other Master Plan elements, such as Transportation, are discussed in the appropriate sections of this EIR.

● Residence Element. The project would comply with Objective 2, Policy 1 of the Residence Element, "In existing residential neighborhoods, ensure that new housing relates well to the character and scale of surrounding buildings and does not reduce neighborhood livability," to the extent that the design succeeds in its intent to relate to development across the street. The scale of the proposed project would be larger than that of the surrounding residential development. The most massive element in the proposal is the existing building at Kansas and 24th Streets which is to be renovated.

The project would comply with Objective 2, Policy 2, "Encourage the conversion of underused non-residential land to residential use..." by converting an unused industrial site in a non-industrial area to residential use.

The project would comply with Objective 2, Policy 4, "Encourage construction of a variety of units suited to the needs of households of all sizes," by providing a mix of sizes of units from studios to 3-bedroom units.

The project would comply with Objective 3, Policy 2, "Allow small-scale non-residential activities in residential areas where they contribute to neighborhood livability," by providing pedestrian and neighborhood-oriented retail stores in an area where, except for one grocery, the nearest shopping area is on the other (west) side of the Freeway.

Objective 4, Policy 1, states, "Preserve and expand the supply of low and moderate income housing." The project might not comply with this policy unless a subsidy is available.

Urban Design Element. The project would comply with Objective 2, Policy 4 of the Urban Design Element, "Preserve notable landmarks and areas of historic architectural aesthetic value, and promote the preservation of other buildings and features that provide continuity with past development," to the extent feasible, by preserving the incinerator and those buildings and walls that are structurally safe and appropriate for reuse (listed in the project description, page 4).

The project would comply with Objective 3, Policy 5, "Relate the height of buildings to important attributes of the city pattern and to the height and character of existing development," and Policy 6, "Relate the bulk of buildings to the prevailing scale of development to avoid an overwhelming or dominating appearance in new construction," to the extent that it would preserve the present height and bulk pattern and

- perimeter development configuration of the present site development, although buildings on the site are taller and more massive than the surrounding residential development. (They are not as large-scale as the San Francisco General Hospital buildings about a block away, but those are probably less relevant to the character of the project area, because they are on the other side of the Freeway.)

The project would comply with Objective 4, Policy 2, "Provide buffering for residential properties when heavy traffic cannot be avoided," by design measures such as double-pane glass to protect dwellings on the west side of the project from Freeway impacts, and by creating a wall to buffer noise on the Kansas Street Side.

Potrero Hill Neighborhood Plan. The proposed project would comply with policies in the Neighborhood Plan, "Housing Strategy C - Increase opportunities for Potrero Hill renters to become home owners." and "Economic Development Strategy B - Promote reuse and rehabilitation of the underutilized commercial and industrial facilities as well as the retention and expansion of existing activities," by providing housing in the Potrero area on an underused industrial site. The Neighborhood Plan calls for "theme trees" along 23rd Street and street trees are also required by Section 143 of the Planning Code. No landscaping plan has been developed yet, so it is not known whether the project would comply with the "theme tree" policy.

● D. Economic and Employment Impacts

Employment. Based on a March 1981 estimated construction cost of \$10,200,000, the project would generate approximately 60% of that, or \$6,120,000, for gross labor costs.¹

The completed project would create full-time employment for approximately 22 persons. Nineteen would be employed in the commercial space, based on an estimate of one person per 450 gross square feet of commercial space.¹

The condominiums would employ three persons, an on-site manager, janitor and mechanical maintenance person. Other employment would be generated for additional project management, landscape, and elevator maintenance; and security personnel. These could be part-time positions.

Revenues. Municipal tax revenues to the City and County of San Francisco generated by the proposed project have been estimated in 1980 dollars at 1980-81 tax rates (see Table 5, page 44). Total annual revenues to the City would be about \$200,000 (1980 dollars) at those rates.

The projected revenue does not include the 1-1/2% tax on selling the condominium units, a tax paid once at the time of sale of each unit. Total estimated revenue to the City from this source would be about \$240,000 (1980 dollars).

Economic Effect of Victoria Mews on Potrero Hill. The Potrero Hill Advisory Committee has requested² a study of the Victoria Mews project (bounded by 19th, 20th, Carolina and Wisconsin Sts.), comparing housing prices in that particular residential neighborhood before and after completion of Victoria Mews, in order to find out if that development caused prices on Potrero Hill to rise more rapidly than they would have otherwise. Statistical analyses of this type are difficult because of variation in size and design from one project to another which causes prices to vary and the inherent inability to obtain local

TABLE 5: ESTIMATED PROJECT-GENERATED MUNICIPAL TAX REVENUES
IN 1980 DOLLARS, CALCULATED AT 1980-81 TAX RATES¹

<u>Tax</u>	<u>Amount</u>
San Francisco Property Tax	\$147,000
San Francisco Unified School District	13,000
San Francisco Community College District	1,000
BART	900
BAAQMD ²	<u>400</u>
Total Non-Bond Property Tax	\$162,300
Bond Retirement	39,000
Payroll	<u>1,800</u>
Total Annual Tax Revenue	\$203,100

¹ Calculated on a basis of average unit price of \$123,000, \$16,200.00 = total sales price = market value; assessed value = 25% market value; \$4/\$100 assessed valuation non-bond tax rate; \$0.97/\$100 assessed valuation for bond retirement; distribution of taxes as in 1980; payroll tax calculated on the assumption that 1/2 or 11 on-site jobs would qualify for payroll tax and that average gross income would be \$15,000

² BAAQMD = Bay Air Air Quality Management District.

information about sales uninfluenced by the presence of that project; it is thus impossible to identify what the neighborhood prices would have been without Victoria Mews.

Page 45 has been deleted.

Notes: Economic and Employment Impacts

1. San Francisco Department of City Planning, FEIR, Ocean Beach Park Estates, EE 78.178, 30 August 1979, p. 126.
2. Potrero Hill Advisory Committee, special meeting, 8 July 1980.

E. Transportation

The project would generate a total of about 740 one-way vehicle trips per day, about 340 condominium-related, 370 for the commercial space, and 30 commercial/residential delivery and service trips. (See Table 7, page 47.)

1981 counts made for this EIR (discussed in Setting, page 28) agree with counts at 23rd and Vermont made by the Department of Public Works in 1976, within probable measurement error, and show that the peak hour for traffic on 23rd St. is 4:15 - 5:15 p.m. As 23rd is the busiest street in the area, project impacts on traffic flow on 23rd could potentially have the greatest effect. The peak in project generated traffic, 88 vehicles per hour,¹ would occur later than the total traffic peak, or from 5:00 to 6:00 p.m.

- During the 4:15 to 5:15 peak traffic hour the project would be expected to generate 59 trips. It is estimated that 60% of the project's 59 peak hour trips, or about 35 trips, would be added, for a traffic increase of about 7% over the present peak hour traffic volume of about 520 vehicles on 23rd Street. This increase would not change the present traffic Level of Service A (free flow).

On Kansas St. about 10 vehicles would be added to the peak hour 220, an increase of about 5% which would not affect the flow of traffic. Addition of about 5 trips to the peak hour volume of about 70 on Rhode Island and 4 trips to the peak volume of 10 trips on 24th St. would increase traffic by about 7% and 40%, respectively, and would not affect the present flow of traffic.

Intersection traffic counts and predicted volumes with the project are shown in Appendix B, pages 123-127. Intersection analysis indicates that all four project intersections would remain at Level of Service A. The Level of Service on the westbound 23rd St. approach to the Potrero Ave. intersection, 4 blocks east of the site, is B at the p.m. peak hour. This would not change with the project. As the free flow of vehicular traffic around the project would not be affected, no impacts on freedom of bus movements would be expected.

TABLE 7: AVERAGE WEEKDAY VEHICULAR TRIP GENERATION

<u>Type of Trip</u>	<u>Purpose of Trip</u>	<u>Total Trips</u>
Residential		
Auto	Work	170
Auto	Shopping	70
Auto	Other	100
Total Residential		340 ¹
Commercial		
8,500 square feet		370 ²
Commercial and Residential Delivery Service		30
Total All Trips		<u>740</u>

Note: All numbers rounded off.

1 2.6 vehicle trips per unit.

2 44 vehicle trips per 1,000 square feet.

Source: Richard K. Hopper, P.E., Consulting Engineer

A proposal for development of 120 units on the former Wisconsin Housing Project site is under review by the Department of City Planning (EE 81.29). Using the same trip generation factor as for the 2222 23rd St. project (Table 7, EIR page 47), the Wisconsin St. project would generate approximately 310 trips in 24 hours compared with 740 for the project. (This assumed that there will be no commercial space in the Wisconsin St. project; commercial uses account for approximately half of the 2222 23rd St. project trips.) Assuming 12% of these trips to take place during the afternoon rush hour, about 40 peak hour trips would occur. If the time distribution of trips were like that of the 2222 23rd St. project, about 30 trips would occur during the afternoon peak hour in the area. If 60% of these trips were on 23rd St., about 20 trips would be added. Together with the 35 trips from the 2222 23rd St. project, this would give a cumulative increase of about 55 vehicles, an increase of 11%. This would probably change the conditions at the 23rd and Kansas Sts. intersection from Level of Service A to B during rush hour. According to the Department of Public Works definition, "Level of Service B describes a condition where the approach to an intersection is occasionally fully utilized and some delays may be encountered. Many drivers begin to feel somewhat restricted within groups of vehicles. The traffic operation can generally be described as very good." See EIR page 122 for other Level of Service definitions, for comparison.

The Wisconsin St. project would generate a similar number of transit trips as the 2222 23rd St. project, or a total of about 10 persons per bus. The approximately 11 empty seats remaining on these buses after allowing for patrons from the 2222 23rd St. project on these 48-seat buses would accommodate the additional passengers.

The project would generate 40 pedestrian trips during the project peak hour. If all these pedestrians were to be at the most crowded section of the sidewalk, the pedestrian count would rise from 1.3 to 2.0 per minute, with no change from the present Pedestrian Level of Service A. Pedestrians were counted as they passed a fixed observer on the sidewalk.

Field investigation⁴ indicates that buses in the project vicinity could accommodate the approximately 50 transit trips (15% of daily total) the project would generate during the peak hour. Assuming that all passengers would be evenly distributed by bus route, approximately 5 passengers (50 divided by 5 bus stops for each of the 2 routes, 19-Polk and 35-Eureka) would board or depart a bus at any single stop during the peak hour. Buses on both routes run every 10-12 minutes at peak hours. The average increase in passenger load per bus would be about 1 per stop, or a maximum of 5 for the project. Passengers going downtown may be transferring to other lines which may not have available capacity.

The existing vehicle access points on Kansas and 24th Sts. would be maintained and additional access would be added from Rhode Island, to 6 parking spaces, and access from 23rd St., to 16 parking spaces. The 24th St. entrance would lead to 77 parking spaces and the entrance on Kansas St. would lead to 62 spaces. Access to the largest parking area is from 24th St. where there is no MUNI line. During rush hour, cars entering and exiting on Kansas St. could interact with buses. The smaller parking areas accessed from 23rd and Rhode Island Sts. would have fewer such interactions.

The 132 dwelling units would require 132 off-street parking spaces and, as the Planning Code requires 1 space per 500 square feet of commercial space, 17 spaces would be required for 8,500 square feet of commercial space. Thus, the Planning Code would require 149 parking spaces. The project would provide 161 parking spaces, 12 more than required.

For planning purposes, the San Francisco Department of City Planning uses 0.78 vehicles per household.⁵ At this rate, the 132 residential units would generate a need for 103 off-street parking spaces. The Manager of Victoria Mews estimates parking space use at that project at 1.3 spaces per unit.⁶ If this rate were to apply for the new project, 132 units would generate a need for 173 spaces.

A maximum of 40 vehicles would need parking spaces during the peak hour of patronage of the commercial space. As the average duration of neighborhood commercial parking is 1/2 hour, a demand of approximately 20 parking spaces would be created by the commercial space during the peak patronage hour. Ten spaces would be needed by employees driving to work in the commercial space. The other employees would walk or use public transit.

The total demand from residents, shoppers and employees would be between 133 and 203, or from 28 less to 42 more than would be provided in the proposed project. A maximum use of one space per unit is considered reasonable by the Department of City Planning.⁷ This would result in a total demand for 162 spaces, or 1 more than provided.

On the streets bounding the project, the 3-6 pm parking demand for neighboring uses is 66 spaces which would leave 81 or 55% of the spaces for project-related parking. If the worst case demand for 42 off-site spaces should occur, this would leave 39 or 27% of the spaces available for party parking, etc. Within a 1-block radius of the site there are an additional 288 spaces. From 3-6 pm 153 or 53% are filled (field check by Bendix Environmental Research, Inc., 12 May 1981). Should parking demand from the proposed Wisconsin Street project extend as far as the area of the 2222 23rd St. project, 47% of this street parking would be available, should closer parking not satisfy the demand from the Wisconsin St. project.

The proposed development would replace 4 curb cuts with 5 curb cuts. Some of the new curb cuts would be narrower than the old curb cuts so that one additional street parking space could be provided. No off-street loading space for deliveries would be provided; none is required by the Planning Code.⁸

Notes: Transportation

1. This differs from the assumption of 10% of total traffic during the peak hour because it is derived for a specified project rather than for the total traffic on the street.
2. Based on 4 February 1981 counts previously cited.
3. Assumption by traffic consultant, Richard K. Hopper, P.E.
4. By traffic consultant, Richard K. Hopper, on 3, 7 and 15 July 1980 and by EIR consultant, Ted Kreines, AICP, on 4 February 1981.
5. Ed Green, San Francisco Planning Department, telephone conversation, 3 July 1980 and Chi-Hsin Shao, San Francisco Planning Department, telephone conversation, 2 September 1980, and Department of City Planning memorandum from Dave Feltham through Alan Lubliner, Project Manager, Center City Circulation Program, to Dean Macris, Director of Planning, 10 March 1981, "The latest available census data (1970) shows that auto availability per household in San Francisco is only 0.777. . . Auto available rates are generally higher than auto ownership rates."
6. Bob Turner, telephone conversation, 23 March 1981.
87. Alan Lubliner, telephone conversation, 23 March 1981.
8. See Sections 152 and 153.

F. Noise Impacts

1. Construction Noise

During demolition and construction of the proposed project, construction equipment noise would be expected to temporarily increase noise levels in the project vicinity. Project sponsors (conversation with developer, 21 July 1980) have estimated demolition time at 2 to 3 months, and construction and rehabilitation at approximately 18 months. The demolition methodology has not been determined. Whether wrecking ball or cranes are used during demolition, the peak sound level generated by these construction activities would occasionally reach 90-95 dBA outside residences on 23rd St. between Kansas and Rhode Island Sts., on Rhode Island St. between 23rd and 24th Sts., and on 24th St. between Kansas and Rhode Island Sts. Typically, noise levels during this phase would range from 60-85 dBA. This sound level would be about the same as existing traffic noise levels. The project haul truck route is not known, but it would probably be along Kansas Street south to 26th Street to Army Street and then to Highway 101 south.¹ Construction would be subject to the San Francisco Noise Ordinance.² Section 2907 Construction Equipment states,

"It shall be unlawful for any person. . . to operate any powered construction equipment. . . if the operation of such equipment emits noise at a level in excess of 80 dBA when measured at a distance of 100 feet from such equipment. . ."

No pile driving is anticipated during construction; therefore, construction noise levels would not exceed demolition noise levels.

2. Traffic Noise

Project-induced traffic would increase surface traffic on 24th St. between Rhode Island and Kansas Sts. by approximately 40%. This would add approximately 3 dBA in traffic noise due to vehicular traffic on 24th St. However, the vehicular traffic noise from the Freeway would exceed the traffic increase due to project-induced traffic on 24th St. between Kansas and Rhode Island Sts. A 3 dBA noise change is usually perceptible; in this case Freeway noise would overshadow the change.

3. Land Use Noise Policy

The Environmental Protection Element of the City's Master Plan³ states regarding residential development in an area with an L_{dn} of 65 or more:

"New construction or development should generally be discouraged. If new construction or development does proceed a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design."

State Noise Insulation Standards for multi-family housing require that "an acoustical report be prepared showing that the interior noise level due to exterior sources will be less than CNEL 45."⁴

The noise level in the courtyard would be expected to be lower than the present 55 to 60 dBA because Freeway noise comes through the driveway gate and this gap would be eliminated.

Notes: Noise Impacts

1. Assuming that debris would be disposed of south of the site, probably south of the county line.
2. City and County of San Francisco Noise and Abatement Control Ordinance No. 274-72, 4 December 1972.
3. The Plan for Transportation Noise Control, adopted by the San Francisco Planning Commission 19 September 1974 by Resolution 7244. The project site is mapped in this report as being in an area with a background noise level of over 65 dBA.
4. Charles M. Salter, 2222 Limited EIR Acoustical Report, 28 August 1980.

G. Air Quality Impacts

1. Toxic Substances From Past Site Uses

A study of toxic substances on the site shows that any toxicity problems on site would be expected to be dominated by the long history of paint manufacture. Paint manufacture generally involves 2 categories of toxic materials: volatile, organic suspension and drying agents, which evaporate rapidly; and pigments, many of them water-insoluble compounds of metals such as cadmium. Until the 1970's, mercury compounds were widely used as mold inhibitors in paint. (See further discussion of paint chemistry, page 60.)

Many volatile organic substances have noticeable odors, responsible for the characteristic odors of paint. Such odors were not generally conspicuous on the site at the time of the first site visits in May and June, 1980. Later, after paint was spilled and sprayed by vandals, paint odors became more prominent, but were presumably not associated with past spills on the site.

A variety of organic materials may be present in the air over the site as a result of evaporation of non-odorous or slowly evaporating materials in unsealed containers on the site. (See Appendix C, pages 129-136, for a list of substances found on site.) Project sponsor has removed all toxic materials from the site and disposed of them in accordance with Title 22, Division 4, of the California Administrative Code, Environmental Health. Any remaining material in the air due to these stored materials should have dissipated in a few days after their removal and would be expected to drop below detectable air concentrations by the time construction begins. (The detectable level for some organics is now in the parts per trillion range.)

One soil sample taken from the area of the site with intermittently detectable organic odors was analyzed for the presence of polychlorinated biphenyls (PCBs) which are sometimes used in paints. None were found.

Leaking electrical capacitors were observed on the site by inspectors from the California Department of Health Services. The leaking material was identified as Aroclor 1254, a commercial PCB product.¹

2. Toxic Substances From Demolition

It is probable that some toxic material is contained in dust and deposits on interior surfaces of some of the buildings to be demolished.

Material on the walls of one of the buildings south of the incinerator contains 60% asbestos.² This friable³ asbestos material would present an inhalation hazard to demolition workers and persons in the neighborhood at the time of demolition. Asbestos inhalation is associated with lung and other cancers.

There is friable material, which looks as if it contains asbestos, on the ceiling and walls of parts of the building to be retained at Kansas and 24th Streets.

The 240 volt transformer in the building south of the incinerator is a dry transformer and so contains no PCBs. Other transformers on the site would need to be checked before demolition for possible PCB content, to avoid dispersal during demolition.

3. Cumulative Airborne Lead Exposure

Regulation 11 of the Bay Area Air Quality Management District (BAAQMD) provides for a ground level lead emission maximum of 0.001 mg/m³. The Federal lead standard is 0.0015 mg/m³ (24 hour average).⁴ There is evidence that lead accumulates in lung tissue when ambient concentrations are greater than 0.0013 mg/m³.

Downtown San Francisco and San Jose have the highest lead levels in the Bay Area (see Table 8).⁵ In the period 1974-1978, the San Francisco monthly average exceeded the federal 0.0015 mg/m³ standard for 21 months. The Potrero measuring station at 900 23rd Street, closer to the project site, exceeded this standard for 2 months in the same 4-year period.⁵

TABLE 8. SAN FRANCISCO QUARTERLY AIR LEAD CONCENTRATIONS
IN MILLIGRAMS PER CUBIC METER, MG/M³

Year	939 Ellis Street Monitoring Station				900 23rd Street, Potrero Monitoring Station			
	JFM*	AMJ	JAS	OND	JFM	AMJ	JAS	OND
1976**	0.00180	0.00185	0.00175	0.00280	0.00082	0.00084	0.00082	0.00195
1977**	0.00183	0.00100	0.00108	0.00139	0.00108	0.00066	0.00068	0.00103
1978**	0.00097	0.00095	0.00199	0.00108	0.00086	0.00051	0.00083	0.00089
1979***	0.00090	0.00054	0.00059	0.00095	0.00079	0.00050	0.00033	0.00046

* JFM = January, February, March, etc.

** Data from Information Bulletin 4-4-79, BAAQMD, 1979.

*** Data from CA Air Quality Data-Summary of 1979 Gaseous and Particulate Pollutants; Teresa Lee, Public Information, BAAQMD, phone conversation 12 August 1980.

Because of the proximity of the site to the Freeway, it is possible that lead in air due to exhaust from cars using leaded gasoline and lead in the air from lead pigments used in paint could cumulatively exceed this standard even if the lead from either source alone were at a relatively safe level. The prevailing winds from the northeast tend to bring Freeway-associated air pollutants over the site. In order to ascertain whether a lead problem exists at the site, on 1 July 1980 air was sampled at 3 locations on the site: the Freeway side, the courtyard, and the side away from the Freeway. Analytic results indicate that lead concentration in all 3 samples was greater than or equal to 0.0012 mg/m³.⁶ The probable error of these measurements was of the order of $\pm 25\%$, so it can be said that the values were probably all within the federal standard but it is not certain that they were below the BAAQMD standard.

Under the relatively infrequent conditions of east wind, there is a possibility that emissions from the Potrero Power Plant could pass over the site. Trace element concentrations from this source have been estimated at 0.000001 mg/m³.⁷

4. Carbon Monoxide

Carbon monoxide (CO) is the air pollutant from vehicular exhaust most likely to be a problem in San Francisco. The major source of CO near the project is the James Lick Freeway (Highway 101), which is separated from the proposed project site by an approximately 15-foot strip of eucalyptus trees and by Kansas Street. According to CalTrans, Highway 101 near the proposed project is one of the most heavily travelled freeways in the Bay Area.⁸ This highway carries approximately 220,000 vehicles per day.⁸ As project trips would be less than 1% of the Highway 101 trips, project generated air pollutants would be undetectable against the existing background of emissions from Highway 101. The BAAQMD monitoring station at 900 23rd Street is the closest air monitoring station to the project. During 1979, the CO standard was exceeded once (compared to twice at the 939 Ellis Street Station). Nitrogen dioxide and sulfur dioxide standards were not violated at either station.⁹

The BAAQMD has recommended that: ". . . residential development should observe an absolute minimum distance of 50 meters from the roadway edge to habitable areas (including yards) and that an optimum distance for air quality purposes should be 100 meters."¹⁰ The site is about 95 feet (29 meters) from the Freeway, and about 25 feet above the surface level of the Freeway.

5. Sensitive Receptors

Patients who may be particularly susceptible to the effects of inhaling toxic substances could be at San Francisco General Hospital, 1 block from the site, across the Freeway, on the north side of 23rd Street. The prevailing northwest winds would blow from the direction of the hospital toward the site. During winter storms, winds from the south could blow from the site area toward the Hospital. During rain any toxic materials in the air would tend to be washed out of the air. Traffic-associated air effects would be dominated by the Freeway passing along the east side of the Hospital and Potrero Avenue traffic on the west side of the Hospital.

Because of natural factors and the proximity of the Freeway, project-related emissions would probably not have an effect that could be detected at the hospital.¹¹

Notes: Air Quality Impacts

1. Letter from David L. Storm, Ph.D., Regional Administrator, Hazardous Materials Management, Department of Health Services, to Carol Roos, OER, 4 December 1980.
2. Microscopic analysis by Robert MacDonough, S.F. Health Department, 21 July 1980.
3. Friable: easily rubbed, or crumbled into powder.
4. 43 Federal Register 46246-46277.
5. Information Bulletin 4-4-79, Atmospheric Lead in the San Francisco Bay Area, 1970-1978, BAAQMD, 1979, p. 5.
6. Analyses performed by LFE Environmental Analysis Laboratories, Richmond, under contract to Bendix Environmental Research, Inc., EIR subcontractor.
7. "Public Health Impact of Emissions From Potrero Plant," Systems Applications, Inc. report SAI No. EF 79-66 prepared for PG&E, 2 May 1979.
8. John Gersler, CalTrans, telephone conversation, 16 June 1980.
9. Contaminant and Weather Summary, BAAQMD, December, 1979.
10. Milton Feldstein, Air Pollution Control Officer, letter to City of Walnut Creek, 24 March 1980.
11. Traffic counts have a probable error of about 10%. As local traffic near the project would be less than 10% of Freeway traffic, it would not have a statistically detectable air pollution impact.

H. Toxic Substances

1. Paint Chemistry

Paints consist of pigments and a medium in which they are suspended that binds the pigment to the substrate. Varnish is a liquid coating material containing a resin that dries to a hard, usually transparent, film. Though usually clear, varnishes may contain pigments. Lacquer is a varnish that solidifies by evaporation of solvents in it. Pigments may be added to lacquers. Paints, varnishes, and lacquers were all manufactured on the site.

Paint was manufactured on this site since the mid-nineteenth century, first by the Bass-Hueter Paint Company; then from 1930-1932 by Dutch Boy, Inc., and finally by National Lead Company until 1970. National Lead has not retained files on this plant.¹ According to a former plant superintendent on this site, paint, stains, lacquers and shellac were manufactured here.²

The most probable residual problem on the site would result from metal-containing pigment contamination of the soil under the concrete that covers most of the site (in some places it is 2 feet thick). This contamination could occur through cracks in the slab. Any organic pigments present would probably be decomposed into harmless compounds by bacteria, fungi and algae in the soil. Metallic compounds used as paint pigments would tend to stay in the soil.

Appendix C, page 137, lists some of the metal compounds used as paint pigments, and gives information on their toxicity. Many paint pigments consist of mixtures, for example, cadmium yellows may contain zinc sulfide in addition to cadmium sulfide.³

During the Synanon organization's tenancy on the site, from 1972 to January of 1980, there was a ceramics workshop on site. Substances used in ceramic glazes include compounds of lead, chromium, copper and cadmium.⁴

2. Soil Analyses

Except for a small area at the southeast corner of the block, the site is totally covered by buildings and concrete pavement. It is not known how long the site has been so covered. In view of the history of over 100 years of paint manufacture on the site, there has been opportunity for soil contamination due to spillage. On the basis of paint and glaze chemistry, 17 soil samples from cores taken by the soil engineer, Warren Wong, and a surface soil sample were analyzed for one or more of the following: arsenic, cadmium, chromium, copper, lead, mercury and zinc. (The probable error of the analytic values is $\pm 5\%$.) The core samples were taken from 1.3 to 20.9 feet below the surface (see Appendix C, page 139 for location and numbering of the core sites), and selected to indicate whether metal levels were present in high enough concentrations to pose a possible hazard to users of the courtyard area. As most of the site is paved, other surface samples will not be accessible until removal of the cement slabs. As it is not known how much new topsoil was brought into the southeast corner of the site for plant nursery operations, analysis of soil in this area has been deferred until the general study to be made after slab removal (see Mitigation, pages 90-91.)

A comparison of normal soil concentrations to the minimum and maximum concentrations found on the site for the 7 elements for which analyses were performed can be seen in Appendix C, page 138. Arsenic was found to be within normal soil limits. Cadmium, copper and mercury are within normal limits for soil, except for the surface sample (see pages 63-64). Zinc, lead and chromium were found to be above normal in samples other than the surface sample. See Appendix C, pages 140-146, for site distribution of these 7 elements.

Lead. Movement of lead in soil is determined by the type of lead compound, the binding capacity of the soil and the acidity of the soil. Lead can be absorbed by plant roots, the degree of absorption increasing in acidic soils. Therefore, the site should be developed in such a fashion that plant roots would not reach soil with above normal lead content. The lead pigments used in paints are water insoluble, so they would be expected to move slowly through the soil, remaining over long periods. Lead has no known role in normal human physiology, and has known adverse effects ranging from anemia, abdominal pain, low blood pressure, loss of appetite and insomnia to brain effects with convulsions often terminating in death, at high concentrations.⁵

The analytic data suggest that lead entered the soil at the north-central and northeast portions of the site. Slow movement through the soil resulted in decreasing concentrations horizontally toward the south and west sides of the block, the expected direction of ground water movement, and with increasing depth. Most of the lead appears to be within 2 feet of the surface in the area of boring No. 2 and the surface sample. The highest concentration found was 4800 ppm⁶ in the surface sample, 4600 ppm above the normal soil lead range and 4792 ppm above the low value of 5.6 ppm, in Core 1. This sample is thus 800 times the minimum level for the site, and 24 times the maximum normal soil range for lead. Maximum lead concentrations found on this site are in the low range of 1,000 to 100,000 ppm lead values found in Oakland where a lead battery manufacturing site was developed as a public park after removal of the surface soil.⁷

Zinc. Zinc was found in highest concentration on the north side of the site in the surface sample and in Core No. 2; zinc decreases moving west, south and by depth. The highest value, 4200 ppm in the surface sample, was 3950 ppm above the normal soil range and 4192 ppm above the low value of 8 ppm in Core 2 at 10.4 feet. This represents an approximately 350-fold increase over background levels on the site. Zinc distribution on the site is shown in Appendix C, page 146. Trace amounts of zinc are required in the human diet as components of cellular catalysts. Ingestion of excess zinc causes nausea and vomiting which tend to remove the material from the system. Zinc compounds are generally less toxic than lead compounds.⁵

Chromium. The distribution pattern of chromium on the site differs from that of lead and zinc, the highest concentrations occurring in Core 8 at the southwest corner of the site, and no systematic variation of concentration with depth is evident. The two highest concentrations, 1000 and 900 ppm occurred in boring No. 8, at depths of 9.4 and 20.9 feet, respectively. These 2 samples are the only samples indicated as shale in the preliminary boring logs of the soil engineer. The third highest concentration, 350 ppm at 15 feet in boring No. 4, was the only sample partially composed of serpentine. Chromium is normally associated with serpentine rocks and tends to concentrate in clay.⁸ Those samples identified in the boring log as dominantly clayey ranged in chromium content from 140 to 260 ppm. Those samples identified as dominantly sandy ranged from 25 to 100 ppm chromium. The chromium content of the samples appears to be due to natural soil and rock composition. Residents would not come in contact with the rock under the site and soil concentrations are generally within the normal range for soil. For distribution of chromium on the site, see Appendix C, page 142.

Like zinc, trace amounts of chromium are required in the human diet. Workers in the chromate-producing industry, exposed to chromium levels substantially above those required, have an increased incidence of lung cancer.⁹

Cadmium. Cadmium was found at 17 ppm in the surface sample taken near the loading dock.

Values in 3 other samples taken at depths of 1.3 to 9.4 feet were all below 1 ppm. The 1.3 foot depth sample was taken approximately 7 feet from the surface sample. Typical soil cadmium concentrations are 0.1 to 7 ppm. The background level at this site is toward the lower end of this range. It appears that cadmium at the project site is probably concentrated near the surface, where it is increased about 20-fold, and has not tended to move down into the soil. For cadmium distribution on the site, see Appendix C, page 141. Cadmium affects kidney function. Increased cadmium consumption should be avoided because many Americans are already close to the level of cadmium intake that can produce symptoms. The soil containing excess cadmium would be removed by the mitigation measure discussed on pages 90-91.

Copper. Copper was 160 ppm in the surface sample, not significantly different from 150 ppm, the top of the range of normal soil concentrations. Three other samples at depths of 1.3 to 9.4 feet ranged from 8 ppm at 9.4 feet to 79 ppm at 1.3 feet. The background level at the site is about 8 to 10 ppm copper, so copper is increased about 16-fold at the surface. A value of 79 ppm at 1.3 feet, Bore 2, suggests that copper has moved further down than cadmium but not far enough to increase concentrations on the entire area under the site. For copper distribution on the site, see Appendix C, page 143.

Mercury. Mercury was 8.6 ppm in the surface sample. The analytic method used did not distinguish between different chemical compounds containing mercury. Average soil mercury concentrations are 0.1 ppm; normal soils range up to 0.4 ppm. The background at the site is about 0.13 ppm. The surface sample is increased about 65-fold over background at the site. Three samples at depths of 1.3 to 9.4 feet ranged from 0.12 to 0.35 ppm. For site distribution of mercury, see Appendix C, page 145. Potentially hazardous mercury-bearing soil would be removed by the mitigation measure discussed on pages 90-91.

Arsenic. Arsenic values on the site were all within normal soil values. The highest value, 60 ppm, was obtained in boring No. 4 at 14 feet, in the sample containing some serpentine, suggesting that it may be associated with the natural content of the sample. The values of 11 and 13 ppm at boring No. 2 and the lack of correlation of concentration with sample depth suggest that arsenic was not spilled in the area where lead and zinc have the highest values and the arsenic may all be of natural origin.

3. Groundwater Quality

Groundwater under San Francisco is part of an aquifer extending under San Mateo County. Some communities in San Mateo County derive part of their drinking water from wells; therefore, it is theoretically possible for ground water contamination in San Francisco to affect San Mateo County drinking water.

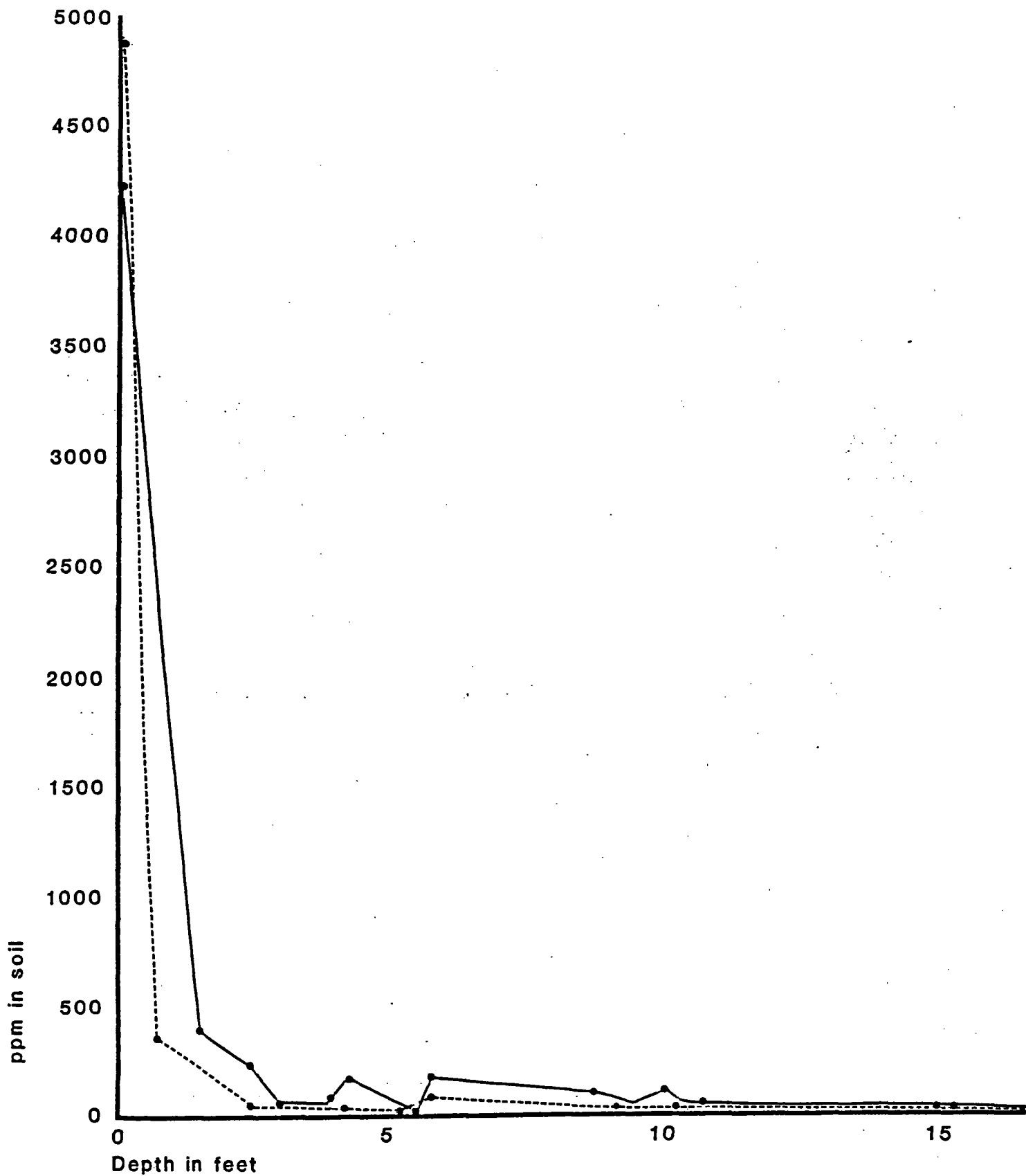
Exhibit 22, page 66, shows that lead and zinc concentrations on the site drop off rapidly with depth. At depths from 5 to 15 feet, zinc concentrations are from 19 to 120 ppm, compared to a normal soil range of up to 250 ppm (Appendix C, page 138). Groundwater would be expected to be moving west toward and under the Freeway. There is no indication from available data that zinc spilled on site is moving off-site in concentrations likely to exceed 250 ppm. Some zinc is probably moving off-site near borings 7 and 9 (Appendix C, page 146). As these amounts are below 250 ppm and zinc concentrations tend to decrease with depth (Exhibit 22, page 66), it appears improbable that zinc from this site would move far enough to reach the San Mateo County line.

Lead concentrations at 5 to 15 feet depth are 6 to 80 ppm (Appendix C, page 144), compared to a normal soil range of 1 to 200 ppm. As lead has moved less through the soil than zinc, the potential for groundwater contamination is less than that for zinc.

As indicated by Appendix C, page 140, arsenic on site is within the normal range; cadmium is above normal in the surface sample and at the low end of normal at other sampling sites (Appendix C, page 141); copper is borderline high in the surface sample and within the normal range at other sampling locations (Appendix C, page 143); and mercury is elevated at the surface sample site, at the top of the normal range at 1.3 feet in boring 2, and at typical soil concentrations at borings 4 and 8 (Appendix C, page 145). These elements are all either natural in the soil or confined to localized surface-contaminated areas. If the site is developed by the sponsor, surface-contaminated soil would be removed. This would be expected to eliminate potential future risk of ground water contamination.

4. Incinerator/Chimney

On the Rhode Island Street site frontage there is a brick incinerator which project sponsor would retain for visual and



Relationship of Zinc & Lead Concentrations to Depth

---●--- Lead
—●— Zinc

historic interest. The incinerator extends 20 feet above the sidewalk, 30 feet above the paved surface to the south of the incinerator, and 35 feet above its base in the building. The inside of the incinerator is coated with a black residue which is peeling in some places. Because of the potential for carcinogenic substances in such incinerator residues, and the potential for people to come in contact with this material (the incinerator is big enough to stand in -- the base is 9'4" x 8' -- and presently easily accessible from inside the buildings on the east side of the property), this material was analyzed for polyaromatic hydrocarbons (PAH) which were judged to be expected by toxicological consultant, Selina Bendix, Ph.D.

Analytic results on a single sample¹⁰ indicate the presence of 400 ppm \pm 10% PAH. The PAHs considered most hazardous by NIOSH (National Institute for Occupational Safety and Health), benzo-alpha-pyrene, benzoepsilon-pyrene, pyrene, chrysene and anthracene, were not detectable. In the presence of so many other PAHs, 20-25 ppm of any of these 5 substances would have to be present to be detectable. These 5 PAHs are carcinogenic and at least 80 carcinogenic derivatives of these 5 compounds are known.¹¹ Benzo-alpha-pyrene is also teratogenic.¹² In view of the large number of PAHs found to be carcinogenic, it is prudent to consider all of the 400 ppm of PAHs to be carcinogenic.

5. Waste Disposal

Various chemicals related to activity on the site remained at the time of initiation of this EIR in June 1980. A list of these materials is given in Appendix C, page 129. The following materials on this list appear on the state Hazardous Waste List:¹³ phosphoric acid, hydroacetic acid, methylene chloride, gasoline, ammonium nitrate, isobutanol, styrene and hydrochloric acid. The removal and disposition of these, and possibly some of the other materials on the site, is subject to the hazardous waste handling regulations in Title 22, Division 4, of

the California Administrative Code and Chapter 615 of the California Health and Safety Code. The Federal Environmental Protection Agency has designated wastes from paint manufacturing as hazardous wastes under the Resource Conservation and Recovery Act of 1976. This action was taken because of the presence of chromium, lead, mercury, nickel, antimony, cadmium, silver and various toxic organic chemicals in paint wastes.

- Materials on the site classified as hazardous must be
- disposed of at a special hazardous waste disposal site. The Regional Water Quality Control Board has approved three Class I, hazardous waste disposal sites pursuant to § 14040(b) of the Porter-Cologne Water Quality Control Act. These sites are in the industrialized area of northern Contra Costa County and southern Solano County (Richmond Sanitary Service in Richmond, Industrial Tank Corporation in Martinez and Benicia). None of these sites accepts materials in drums. The developer contracted with Zero Waste, Inc. to remove these materials in conformance with applicable regulations. Field check by the EIR consultant on 25 November 1980 indicated that most of the containers of chemicals on the site had been removed. Five 55 gallon drums labelled "Chicago Candy Co." remain. Nontoxic reusable materials from the site, remaining from the Synanon organization, have been given by project sponsor to local nonprofit organizations.

Many chemical waste disposal sites have proven to have drums of chemicals below the surface. In the absence of information about past waste disposal practices at the site, it is possible that subsurface storage tanks or other disposal exist on the site.

Along the east side of the block, under the sidewalk, there are a number of tanks. Toward the northern end of the block there are 5 metal storage tanks of 4.8 feet diameter, with manhole frames and covers in the sidewalk, spaced approximately 22 feet apart (center to center). Associated with these tanks are five 2 x 2 ft. metal covers in the sidewalk over inlet valves that connect to the subsidewalk tanks as well as pipes going through the retaining walls. The equipment these pipes connected to has been removed.

These 5 tanks were installed in 1946 pursuant to a Fire Department permit. The permit lists the contents as mineral spirits with a flash point¹⁴ of 115°F. and tank size as 11,100 gallons. The Fire Department requires that any subsurface tank abandoned for more than 6 months either be removed or filled with sand and rendered inert. Ken Long, Fire Department Fire Protection Engineer,¹⁵ recommends that these tanks be removed. It is likely that these tanks are now empty; however, there is a possibility of a fire hazard if vapors remain.

Further south there are more metal covers in the sidewalk and patches of newer concrete which may indicate former plate locations. Those plates that are moveable have valves under them. It seems probable that at least some of these valves still have tanks under them. It is not known whether these tanks are empty or what their past or present contents may be.

On the east side of the courtyard are two valves, labelled "gas fill cap" on the surveyor's map,¹⁶ which may be inlets for a gasoline storage tank(s).

The valves to all the tanks are rusty and could not be moved.

Notes: Toxic Substances

1. Samuel R. Wilson, Director of Distribution, Coating Group, Dutch Boy, Inc., letter received 17 July 1980.
2. Richard J. Marklin, Pioneer City, California, telephone conversation of 17 July 1980.
3. Cadmium lithopone pigments contain cadmium sulfide and barium sulfide; cadmium sulfo-selenides are mixtures of cadmium sulfide, cadmium selenide and selenium sulfide; and the mercadium pigments contain mercuric sulfide and cadmium sulfide. National Toxicology Program, First Annual Report on Carcinogens, July 1980, Vol. II, p. 77.
4. For a brief discussion of ceramic chemistry, see Demo, Allan A., "Chemistry for Potters, J. Chemical Education," 57:72-275, 1980.

5. NIOSH/OSHA Pocket Guide to Chemical Hazards, USDHEW and US Dept. of Labor, 1978, p. 118; Sax, N. Irving, Dangerous Properties of Industrial Materials, 5th Ed, Van Nostrand, 1979, pp. 766 et seq.
6. Another portion of this sample, analyzed by a different method, gave 5200 ppm.
7. Wesolowski, Jerome J. et al., "The Identification and Elimination of a Potential Lead Hazard in an Urban Park," Archives of Environmental Health, 34:413-418 (1979).
8. United States Mineral Resources, Geological Survey Professional Paper 820, 1973, p. 112.
9. National Toxicology Program, First Annual Report on Carcinogens, July 1980, Vol. 1, p. 22.
10. Analysis performed by LFE Corporation.
11. Listed in NIOSH Registry of Toxic Effects of Chemical Substances, 1978.
12. Teratogenic = causing birth defects.
13. California Administrative Code, Title 22, Division 4, Chapter 30, Section 66680.
14. Flash point = the lowest temperature at which vapors from a volatile liquid will ignite momentarily when a small flame is applied under specified test conditions; an indication of degree of fire hazard (the higher the flash point, the lower the hazard).
15. Telephone conversation, 25 November 1980.
16. Exhibit 3, page 6; larger scale drawing available for public review at the Department of City Planning, 45 Hyde Street, Room 319.

I. Energy

1. Building Materials

The energy consumed for heating, hot water, lighting, etc. during the lifetime operation of buildings is greater than the energy required to make building materials, transport them to the site and construct a building. The energy required for building materials is not negligible, however, as can be seen from the following list. The use of aluminum and copper increases the energy intensiveness of construction.

TABLE 9: ENERGY INTENSIVENESS OF TYPICAL BUILDING MATERIALS

<u>Material</u>	<u>Energy to Fabricate</u>	
	<u>BTU* per lb.</u>	<u>BTU* per unit</u>
Aluminum	41,000	
Ceiling materials	1,500	
Concrete	400	
Concrete blocks (8"x8"x16")		15,200/block
Copper	40,000	
Drywall	2,200	
Glass	12,600	
Paint	4,100	
Roofing		6,900/sq. ft.
Steel	13,800	
Vinyl tile	8,000	

* BTU = British Thermal Unit; a standard unit for measuring heat, about equal to that from burning one standard wooden kitchen match. Technically, it is the quantity of heat required to raise the temperature of one pound of water 1° Fahrenheit at sea level.

Source: Kegel, Robert A., "The Energy Intensity of Building Materials," Heating/Piping/Air Conditioning, June 1975, pp. 37-41.

Construction energy consumption for the proposed project is estimated to be the equivalent of 11 million kilowatt hours (kwh) of electricity, based on an estimated energy consumption of 9.3 million kwh per \$10 million of construction cost.¹ The estimated construction cost for the proposed project is approximately \$11.8 million

2. Operating Energy Consumption

If natural gas is used for heating hot water, cooking and space heating, each unit would use about 100 therms (10 million BTU) of gas per month and 300 kwh of electricity per month, or about 13,000 therms of gas and 40,000 kwh of electricity per month for 132 units.

If electricity is used for other purposes, approximately 3 times as much fossil fuel would be used as in the direct burning of natural gas. Use of electricity for heating hot water and space heating would increase electrical consumption to about 1,000 kwh/mo./unit, or 137,000 kwh/mo. for the whole project, and would decrease gas consumption to 25-40 therms/mo./unit, or 3,400 - 5,500 therms/ mo. for the project.² Electrical space heating and cooking would be approximately 2.7 times as expensive as gas. Assuming that electricity would not be used for space heating, the connected load would be approximately 300 kilowatts.

Assuming use of gas for water and space heating and for cooking, electricity would be mainly used for lighting. Peaks would be expected in the morning, while people were getting ready to go to school and work, and in the evening, between 5 and 11 p.m., when all members of the household would tend to be home using appliances and lights. The evening peak would tend to be larger than the morning peak. Electrical energy use would peak during the short days of winter, when lights would be on longer, and would be lowest during the long days of summer.

Natural gas load distribution curves would be similar to those projected for Ocean Beach Park Estates, a larger combined

residential-commercial project.³ The summer minimum would occur in the middle of the day when people would be least likely to be home and the winter minimum would occur in the afternoon, the warmest part of the day. The winter maximum would occur in the morning due to space-heating to day temperatures. Gas consumption would peak in the months of December and January, when the most heating would be required, and would be at a minimum in September and October which are usually the warmest months in San Francisco. This analysis does not include the possible use of natural gas for heating swimming pool water.

3. Energy Conservation

Air Quality. The more carefully a building is constructed, with attention paid to the fit of windows and doors, the smaller the exchange of air through cracks and the lower the level of energy requirements for heating and cooling, if any. In order to minimize noise intrusion from freeway traffic, windows on the west side are expected to be double pane glass, which would also decrease heating energy use (see Mitigation Chapter for further discussion of double pane glass).

As building air leakage is reduced, exposure of occupants to gases given off by building materials increases. This is of particular concern in the cases of radon and formaldehyde. Radon is a radioactive gas naturally given off in varying amounts by all building materials. Radon concentrations increase detectably in buildings with ventilation rates below 0.3 air changes per hour.⁴ Detailed information on the potential hazard of increased radon exposure in energy-efficient buildings is not available. This matter is being investigated by the Federal Department of Energy (DOE). Current belief is that "routine" measures to increase energy efficiency are not increasing radon exposure enough to have a detectable effect.

Formaldehyde is a carcinogenic substance used in the manufacture of resins, wall board, and insulation. Part of the formaldehyde remains unreacted when these materials are made and

slowly diffuses out of the materials. In relatively air-tight homes, the formaldehyde concentration may become high enough to produce irritant effects on the occupants. Formaldehyde is an irritant to the respiratory tract and eyes at 0.01 ppm⁵ and to skin at 0.15 ppm.⁶ The NIOSH recommended standard for occupational exposure to formaldehyde is 1.2 ppm.⁷ The European indoor air standard is about 0.1 ppm. It has been found that energy-efficient buildings, with reduced air infiltration and low ventilation rates of or below 0.3 air changes per hour, exceed the European standard when outdoor formaldehyde concentrations are 0.016 ppm.⁸

Solar Energy. Use of solar energy is under consideration by project sponsor, see page 94. Use of solar energy for heating water would decrease demand for nonrenewable energy sources. Current cost for solar water heaters on single family homes is about \$3,000 per unit installed.⁹ Solar collectors for a recently built San Francisco apartment building with a similar number of units to the proposed project cost about \$120,000 and are expected to provide 60% of the hot water supply.¹⁰ Cost for the proposed project would be expected to be similar.¹¹ Approximately 35-60 square feet of collector per dwelling unit would be required,¹² or 5,000-8,000 square feet for the whole project.

Fuel savings could more than offset the cost of solar panels during the lifetime of the project; the initial costs would become part of the purchase cost of the units. Payback time due to reduced fuel costs would be 5-7 years. Tax benefits for solar installations include tax credits for a portion of system costs and accelerated depreciation.

Solar cells have the advantages of producing electricity and not involving use of heat transfer liquids which can leak. Their disadvantage is expense, partially due to their low efficiency (maximum conversion of 15% of solar energy to electricity). Some solar cells involve the use of cadmium compounds and consequent risk of exposure to a toxic material of the workers who make them. Some firms hope to bring the installed cost from the present

approximately \$10 per watt to \$0.50 per watt by 1990. The Department of Energy has a National Photovoltaic Program aimed at production of low cost, high volume solar cells. Solar cells are not an economically viable option for the proposed project now, but may become cheap enough for retrofit within the next decade.

Wind Energy. Wind power, independent or in combination with solar units is another inexhaustable energy source. In 1977, it was estimated that "the minimum cost of a domestic plant would be about \$2,500 and would supply approximately 1/4 of the energy demand of the entire household. An installation adequate to supply an average household would cost in the vicinity of \$10,000."¹³ A wind speed of at least 10 mph is needed for wind power generation. A 60 to 80 feet tower¹⁴ is required, depending on upwind obstructions. The blades of a 10 kw windmill would have a spread of 30 to 35 feet.¹⁵ A \$20,000 wind generator in an average wind of 10 mph would produce 22,000 kwh/yr. or 4% of the project's annual energy consumption.

Site specific wind speed records of several years' duration are required in order to calculate the potential for wind energy generation at any particular site. Such information is not available for the project site. A wind speed recorder could be placed on the roof of the project, should it be built, in order to obtain information for a future decision on the feasibility of windpower generation on the site. Any future decision on installation of 1 or more windpower generators would also have to take into account windmill noise generation, community response to visual impact of wind generators and the economics of windpower generation.

Notes: Energy

1. City and County of San Francisco, FEIR, Ocean Beach Park Estates, EE 78.178, 30 August 1979, p. 125, adjusted for construction cost inflation.
2. Robert Tucker, Dealer Representative, PG&E, telephone conversation, 19 August 1980.
3. City and County of San Francisco, EE 78.178, FEIR, Figure No. 24, page 127, 30 August 1979.
4. Hollowell, Craig D., et al., "Radon-222 in Energy Efficient Buildings," American Nuclear Soc. Mtg. 11-16 November 1979.
5. California State Energy Resources Conservation and Development Commission, EDIR Residential Insulation Program, 22 February 1978, p. 60.
6. NIOSH Registry of Toxic Effects of Chemical Substances, 1978, p. 587.
7. NIOSH, op. cit.
8. Lin, Chin-I, et al., "Indoor/Outdoor Measurements of Formaldehyde and Total Aldehydes," 178th, Nat'l Mtg. Amer. Chem. Soc., 9-14 September 1979.
9. John Burton, Integral Design, "Low Cost integral Solar Water Heaters," No. Cal. Solar Energy Assn. Newsletter, p. 7, September 1980.
10. Solar Center, San Francisco, telephone conversation, 28 August 1980.
11. Bryan Kiefer, Jones & Kiefer Construction Co., San Francisco, telephone conversation, 28 August 1980.

12. Tim Duane, Intern, PG&E, telephone conversation, 28 August 1980.

13. Senior Seminar, Environmental Studies Group Major, UC Berkeley, "Energy in the Bay Area." June 1977, p. 157.

14. Windmills are not subject to height limits per section 260(b)1(A) of the Planning Code.

15. Neil Holbrook, Power Towers, Inc., Pleasant Hill, telephone conversation of 9 February 1981.

J. Community Services

1. Water and Wastewater

According to the most recent San Francisco Water Department annual report,¹ City-wide residential water consumption is 35.8 million gallons per day (mgd). Assuming a population of 675,000,² this means an average of 55 gallons per day (gpd) per person.

Assuming 2.1 persons per unit, a 132 unit development would consume 15,200 gpd, or 0.0004% of San Francisco's annual residential water consumption. The water supply in the area would be adequate for the project.³ The swimming pool would use approximately 1500 - 2000 gpd, or an additional 10-13% of the other project water use.

Sewage from the site drains to the Southeast Water Pollution Control Plant (SEWPCP). There are 12 inch diameter collector sewers on the west, north and east sides of the site and a 16 inch sewer on the south side. These sewers drain to a larger sewer in Kansas Street, a few feet west of the collector sewer.⁴ These sewers could accommodate the wastewater from the proposed project.

Wastewater flows are typically 70% of water use.⁵ In San Francisco, where lots tend to be smaller than elsewhere in the Bay Area, and a smaller percentage of water is used for landscape irrigation, the figure is 90%. Expected flow from 132 units would

- be 0.90 x 15,200 or 13,700 gpd. The SEWPCP has a capacity of 70 mgd, and receives an average of 22 mgd in dry weather.⁶ The flow from this project would constitute 0.07% of the dry weather flow to the plant adding 2000 gpd for the swimming pool, the total water use of the project would be a maximum of 15,700 gpd.

The effluent from the SEWPCP does not meet applicable standards. Improvements are under construction which will bring the treatment level to secondary treatment and increase the capacity of the plant.⁷ This is one of many projects implementing the San Francisco Wastewater Management Master Plan. Implementation of this entire plan will be required to bring the City into compliance with the Federal Clean Water Act.

2. Fire and Police Services

According to Chief Robert Rose (meeting on 2 July 1980), water supply, hydrant location and fire equipment access are adequate for the proposed project at the proposed site.

Police department records of incidents "in the area of Kansas Street and Rhode Island between 23rd and 24th Streets" are as follows:

TABLE 10: CRIME INCIDENCE IN PROJECT AREA

<u>Type of Crime</u>	<u>1978</u>	<u>1979</u>	<u>1980 to July 1980</u>
Auto Theft or Burglary	10	15	8
Robbery	0	1	2
Residential Burglary	4	1	1
Battery	1	1	0
Petty Theft	0	1	0
Kidnapping	0	1	0

Source: Letter from Officer Robert Baldocci, #441, of
3 July 1980.

Officer Alfred Baldocci of the Potrero Police Station states that, "As you can see from this report, the incidence of crime in the area is minimal and this picture should change for the better with the increase of public activity in the area.... I don't feel at this time that a development of this nature will cause any particular problem for our department's operation."⁸

3. Solid Waste

Assuming 2.5 pounds of solid waste production per person per day,⁹ and 2.1 persons per unit, 132 units would produce about 700 pounds of solid wastes per day or 0.023% of the 1500 tons produced daily by the City as a whole. Household solid wastes produced by the project would be disposed of at the landfill site in Mountain View, Santa Clara County. The capacity of this site is expected to be exhausted by about 1983 and no alternative future method for disposal of San Francisco's solid waste has yet been selected. For a discussion of alternatives under consideration, see the Final EIR for a "Resource Conversion Center, Brisbane/San Francisco, California," City of Brisbane, 1980.¹⁰

4. Schools

Children residing on the site would attend the following schools: Elementary (grades K-5) students would walk 2 blocks to Starr King at 1215 Carolina Street; middle school (grades 6-8) students would walk 4 blocks to Potrero Hill at 655 De Haro; and high school students would go approximately 1-1/2 miles to Mission High at 3750 18th Street. The above school assignments are effective through 30 June 1981.¹¹ The School District as a whole could accommodate students from the proposed project.¹²

Notes: Community Services

1. Report for Fiscal Year 1978-9, San Francisco Water Department, 1979, page 11.
2. Preliminary report on "Population and Housing in the San Francisco Bay Region 1979-1980," First Draft, ABAG, 4 February 1981.
3. Jack Kenck, City Distribution Manager, San Francisco Water Department, telephone conversation, 16 June 1980.
4. Letter from Mervin Francies, Engineering Associate II, San Francisco Wastewater Program, received 3 July 1980.
5. Metcalf & Eddy, Inc., Wastewater Engineering, 2nd Ed., McGraw Hill, 1979, page 21.
6. FEIR, Southeast Treatment Plant Dry-Weather Expansion & Interim Point Discharge, City and County of San Francisco, April 1975, p.--IV-1.
7. Secondary treatment is the treatment of wastewater by a biological or physical chemical process, after primary treatment. It provides approximately 90% removal of BOD. BOD = an abbreviation for biochemical oxygen demand, a standard measure of water and wastewater quality.
8. Letter from Officer Robert Baldocci, #441, of 3 July 1980.
9. Solid Waste Generation Factors in California, Technical Information Services, Bulletin #2, California Solid Waste Management Board, 8 July 1974.
10. Available for public review at the Department of City Planning, Office of Environmental Review, 45 Hyde Street, file number EE 79.307/NLA.

11. Edward R. Schulman, Program Manager, School Operations, San Francisco Unified School District, letter received 3 July 1980.

12. Schulman, E.R., telephone conversation, 26 June 1980.

K. Earthquake Effects

Retained Structures. The 5-story building at the corner of Kansas and 24th Streets and the brick facades designated for retention would be examined by a structural engineer, and his/her recommendations would be followed in project design (see Mitigation Chapter, page 95).

Seismic Safety. A site specific geotechnical analysis, as required by the Seismic Safety Element of the General Plan for the City and County of San Francisco, has been made by Warren Wong of Geo/Resources (California License No. CE 25777). Implementation of the foundation recommendations may become a condition for approval by the Planning Commission or the Bureau of Building Inspection.

Retaining Wall. Along the eastern property line there is a 10 to 13 foot tall retaining wall. In the sidewalk area with asphalt paving, east of the retaining wall and south of the auto repair building, there is evidence of subsidence and slippage toward the retaining wall suggesting some instability in this area. Where it can be seen, this retaining wall is of varied design ranging from 4 to 10 inch thick concrete to 12 inch thick wood. It is likely that the wooden sections, at least, do not meet current City building codes. The integrity of the water, sewer, natural gas, electrical and telephone lines under Rhode Island Street is dependent on the structural stability of this retaining wall. Construction is planned up to these walls so that below sidewalk grade portions and foundations of buildings on the east side of the proposed project would depend on the integrity of this retaining wall.

L. Plants

Landscaping in the courtyard would not be visible from the sidewalk. As designed, project buildings would come to the sidewalk, leaving no space for planting. One street tree would be planted for each 20 feet of street frontage (over 60 trees), as required by the Planning Code. Existing shrubs and trees on the east side of Kansas Street would screen much of the view of the Freeway.

M. Short-Term Uses of the Environment vs. the Maintenance of Long-Term Productivity

Development of the project now would commit the site to residential use and would probably constrain future decisions about use of the site for at least 50 years. In view of the current need for housing in San Francisco and the probable long-term nature of this need, it appears reasonable to make a commitment to housing use rather than leave future options open.

If the 1980 increase of 15% in San Francisco construction costs persists in future years, then it will become progressively more difficult to finance housing construction and to find buyers who can afford new housing. If this site is to be committed to a housing development of some type, the sooner this is done, the lower the cost of the completed units and the greater the number of households that could afford them.

The developer wishes to pursue the proposed project at this time because costs for construction and financing of such developments may increase at a faster rate than prospective buyers' incomes.

N. Growth-Inducing Impact

The proposed project would add about 275 residents on the now vacant site. The project would meet existing housing needs rather than attracting new City residents who would otherwise not consider moving into the City.

Most of the new residents would probably be upper middle income persons because only these persons could afford the units. Most of these people would hold their jobs whether new housing was available in San Francisco or not; however, there is increasing evidence that people are reluctant to take jobs in San Francisco because of the difficulty in obtaining housing.¹ The availability of sufficient housing to meet San Francisco demand would probably reverse the current trend to population loss.² This project alone would not have a noticeable effect on San Francisco's population.

Notes: Growth-Inducing Impact

1. Bay Area Council, "Housing, the Bay Area's Challenge of the '80s," December 1980.

2. ABAG, "Population and Housing in the San Francisco Bay Region 1970-1980," First Preliminary Draft, 4 February 1981.

O. Neighborhood Concerns

Neighborhood organizations were contacted regarding the project.¹ These organizations appear to be divided among those who view the project as a stabilizing influence on the neighborhood, those who think the project would increase housing costs in the area and those with environmental concerns.

One view is that the project's housing costs would be too expensive for most current residents of the community² and that most of the units would be too small for the large families who currently live in the area.³ There is concern that if the project is built, housing costs in the community would rise more rapidly than without the project. As housing costs increase it would be more difficult for existing residents to buy or rent housing in the community.⁴ Some feel that low and moderate income housing should be built on this site.⁵ Some think that the neighborhood already has enough low income housing and that government financial assistance for low and moderate income housing should go toward rehabilitation of abandoned units in the housing projects near the site.⁶

Other neighborhood groups feel that the project would lead to reinvestment in and revitalization of the neighborhood⁷ and add people and security to a block subject to vandalism.⁸

There is concern that the project does not include enough open space for project residents,⁹ that the project would be too dense and out of scale with the existing community of mostly two-family units.¹⁰ Groups with environmental concerns think that noise from the James Lick Freeway would create unfavorable living conditions in the project,¹¹ while others are concerned that chemicals from the site's former use for paint manufacturing may be harmful.¹²

Notes: Neighborhood Concerns

1. Potrero Hills League of Active Neighbors (PLAN), discussion with Maria Vermiglio, President: 23 June 1980.

Potrero Hills Community Development Corporation (CDC), discussion with Jim Queen, President and Brian Chekowski, Counsel, 7 July 1980.

Potrero Hills Boosters and Merchants Association (PHB&MA), discussion with Mike Krivitt, President, 3 July 1980 and appearance before PHB&MA Board, 29 July 1980.

Potrero Hills Homeowners and Renters Association (PHH&RA), discussion with Joan Tricamo, 3 July 1980.

Potrero Hill Advisory Committee (PHAC), special meeting 8 July 1980.

Contacted by Kreines & Kreines, EIR consultants.

2. PLAN and CDC.

3. PLAN.

4. CDC.

5. CDC.

6. PHB&MA.

7. PHB&MA & PHH&RA.

8. PHB&MA.

9. PHAC.

10. PLAN.

11. PHH&RA

12. PHAC

V. MITIGATION MEASURES

Mitigation measures described below may be part of the project as proposed by the developer or may either be under consideration or rejected by the developer, as noted. Those measures not part of the project could be required as conditions of project approval.

A. Urban Design

Impact. The mass and design of the project would not match surrounding buildings, particularly along Kansas Street.

Mitigation. The developer would consider making changes to the existing plan for the Kansas Street units to bring them into greater conformity with the prevailing character of development on Potrero Hill. The developer would consider continuing the peaked roof design of the rest of the project along Kansas Street, where the proposed structure would otherwise present a solid, unbroken facade. A decision would be made by the developer after consultation with staff of the Department of City Planning, the noise consultant and the project architect, and before completion of construction plans.

- The scale of the rehabilitated warehouse building would be mitigated by attention to creation of pedestrian-scale visual interest in the design of the commercial space on the first floor. Placement of bus shelters on sidewalks bounding the project is under consideration. Submission of scale drawings for treatment of the new facades of the warehouse building and of adjacent sidewalk could be required by the Planning Commission as a condition of the Conditional Use Permit. Submission of plans
- for sign control could also be required. Project sponsor would consult the Planning Department before selecting street trees.

B. Historic Structures

Impact. Development of the site could result in loss of the visually prominent chimney on Rhode Island which is listed in the Department of City Planning 1976 Architectural Inventory.

Mitigation. Project sponsor would retain the chimney.

C. Housing Cost

Impact. The new housing prices could price some people out of the market for the project.

Mitigation. Remodeling of the building at Kansas and 24th Sts. would lower the cost per unit in the development below the cost of all new construction. More people would be able to afford the units at the lower prices (note that all new market rate housing is relatively expensive).

D. Noise

Impact. Freeway noise could disturb project occupants.

Mitigation. State regulations (Title 25, California Administrative Code) require that window and wall construction provide for noise reduction to mitigate the existing freeway traffic noise impacts on the west side of the project. The interior noise level must be limited to a maximum CNEL of 45 dB. Acoustical analysis of the proposed building will be performed to determine the extent of the noise control that would be necessary. Preliminary calculations indicate that windows in those walls with maximum outdoor noise exposure would require double glazing or laminated acoustical glazing with an STC¹ rating of about 30. The developers have stated that project construction would conform to the Noise Insulation Standards.

The effect of construction noise would be controlled by the provisions of the San Francisco Noise Ordinance². The project sponsor must comply with this ordinance.

In accordance with Section 2908 of the San Francisco Noise Ordinance, no construction would take place between the hours of 8:00 p.m. and 7:00 a.m.³

E. Toxic Substances

Impact. Potentially toxic dust could drift off site during demolition.

Mitigation. In order to avoid dispersion of potentially toxic dust through the neighborhood, Bendix Environmental Research, Inc., toxic materials consultant for this EIR, recommends that continuous water spray be used during demolition to achieve adequate wetting to prevent dust emissions, as required for demolition of buildings containing asbestos by 39 CFR 1910.1001.

- Project sponsor would implement this measure. This could be required by the City Planning Commission as a condition of the Conditional Use Authorization for the PUD.

The late Robert MacDonough, Environmental Health Inspector, San Francisco Department of Public Health, concurred in this recommendation and further recommended that any dusty or friable material be bagged and tied to prevent toxic dust dispersion.⁴ Project sponsor is considering this measure and would decide after talking to the demolition contractor about feasibility and cost and before authorizing demolition.

Demolition of the asbestos-containing building south of the incinerator, must comply with Section 1919.1001 of the Occupational Safety and Health Administration's general industry standards, Part 1901, Title 9 of the Code of Federal Regulations, which provides that employees "engaging in the...demolition of pipes, structures, or equipment covered or insulated with asbestos and in the removal or demolition of asbestos insulation or coverings shall be provided with respiratory equipment...and

with special clothing..." The section also provides that when asbestos is removed it must be kept wet "to prevent the emission of airborne fibers." In practice this is usually achieved by use of a water spray during demolition.⁶ Project sponsor would comply with applicable regulations regarding asbestos during site preparation, demolition and remodelling phases of the project.

- Project sponsor would meet with a representative of the DHS Hazardous Wastes Section to discuss demolition procedures before completing the demolition contract, in order to insure that the contract adequately reflects the special nature of the site and to avoid potential delays due to lack of understanding of special demolition requirements by the demolition contractor.

Impact. Buildings to be retained may have asbestos-containing interior finishes.

Mitigation. Project sponsor would have the buildings to be retained checked. If interior finishes contain more than 1% asbestos, sponsor would have the material sealed or removed during renovation and prior to occupancy. Any removal would be done in a fashion to avoid exposure of workers or future occupants to asbestos containing dust.⁷

Impact. Occupants might breathe lead concentrations detrimental to their health.

Mitigation. The highest risk of lead pollution to project residents would be from the freeway west of the site. This risk would be mitigated by installation of windows that do not open in units along Kansas Street (the west side of the project). These units would have mechanical ventilation systems. The air intake for this ventilation system would be located as far east on the proposed project block and as high up as is feasible. The developer would implement this measure as part of the project.

Impact. The peeling, black, potentially carcinogenic layer inside the incinerator could be a source of human exposure to PAHs (poly-aromatic hydrocarbons); surface soil could be contaminated by PAHs.

- Mitigation. Project sponsor would seal the incinerator to prevent contact by project residents with hazardous PAH-containing materials. The EIR consultant, Selina Bendix, Ph.D., has recommended 3 safety measures: 1) seal the opening at base of incinerator; 2) seal the top of the chimney; and 3) remove enough metal rungs on the side of the chimney to prevent access and/or injury by and/or to unauthorized persons. Dr. Ephraim Kahn of the California Department of Health Services concurs in these recommendations.⁸
- The opening in the base of the incinerator would be sealed in such a fashion that any material flaking off the inside of the incinerator could not get out and no one could reach in and peel off any of the black lining. The seal would not need to be airtight because PAHs are not volatile. Under these conditions, the potential for human exposure would be less than if the incinerator were demolished. Demolition would break up the lining into small pieces, thus increasing the risk of dispersion of the carcinogenic material in the air where people could breathe it. The entrance seal would be made in such a way that the arched shape of the opening would still be visible and the seal would not detract from the appearance of the chimney.

The State Department of Health Services has indicated concern⁵ that the exposed soil in the southeast corner of the site may have been subject to PAH fallout from smoke from the chimney. Before excavation this soil would be tested for PAHs and if any are found, disposition of the soil would be discussed with staff of the Hazardous Materials Section.
- The interior of the incinerator is not in contact with the soil and PAHs would move relatively slowly through the soil if such contact were to exist. This is because they are not soluble in water and material from inside the incinerator would be in particles larger than many of the soil particles and would move with difficulty between the soil particles.

• The San Francisco Health Department has indicated a place where earth fill has been revealed by removal of floorboards by trespassers and requested that this soil be analyzed before demolition. Project sponsor would have this done."

Impact. According to the State Department of Health Services,⁵ the upper levels of the building in the northwest corner of the site were used to mix and store dry paint ingredients which could pose a hazard during demolition.

Mitigation. Project sponsors would have the area inspected for residual paint ingredients and, if found, have these materials removed prior to demolition.

Impact. The distribution pattern of high lead and zinc values in soil on the site is not known. Some soil samples have excessive levels of cadmium and mercury. Contact with these soils could be hazardous.

Mitigation. After removal of the existing concrete floor slabs, project sponsor, in consultation with the State Department of Health Services, would have analyses made to determine the distribution of high lead, zinc, cadmium and mercury values on the site, and 1 to 2 feet of top soil in the contaminated area

would be removed and deposited in a hazardous waste dump if necessary.

Measures designed to mitigate lead and zinc exposure would also mitigate cadmium and mercury exposure unless differences in distribution are shown by further soil analysis. The State Department of Health would monitor analyses and advise as to appropriate mitigation measures, which would be followed by project sponsor.

The soil in the depressed area of the concrete floor of the 5 story building could contain toxic materials. This area would be subjected to chemical analysis and would be removed or sealed, if necessary and as appropriate, on the basis of these tests before the area is filled in to make it level with the rest of the basement parking area. Should any toxic material be found on analysis, the Hazardous Waste Section of the State Department of Health would be consulted before decision on disposition.

- Should any information relevant to groundwater quality become available after demolition begins, Theresa G. Rumjahn, Sanitary Engineering Technician, Regional Water Quality Control Board, would be contacted. She would refer this information within the agency, per its operating rules.

Impact. The containers of chemicals on the site pose a hazard of fire and poisoning.⁹ The site is not vandal-proof.

- Mitigation. The project sponsor has removed hazardous substances from the site, in accordance with applicable regulations⁸ and in consultation with the State Department of Health Services.

Impact. Abandoned tanks beneath the sidewalk east of the site may contain hazardous materials.

Mitigation. In order to mitigate potential impact on construction workers, neighbors, and future occupants from toxic chemicals beneath the concrete slabs which now cover most of the site surface, the City Planning Commission or other City agency having approval power for this project would require that:

a) The subsidewalk tanks adjacent to the east side of the property and any other tanks on or adjacent to the site be opened, aired out, and any contents analyzed and disposed of according to applicable laws and regulations after consultation with the State Department of Health. The tanks would then be removed, as recommended by the Fire Department, to eliminate any possibility of hazard to construction workers or future project residents. Such removal would also permit removal of pipes from the tanks penetrating the retaining wall; these pipes would otherwise interfere with work to strengthen or replace the retaining wall. Removal would be done in such manner as not to undermine the street or substreet utilities. The holes left by the tanks would be backfilled in accordance with recommendations of a licensed engineer.

Should it prove to be technically inadvisable to remove the tanks, they would be filled with sand and otherwise rendered inert to the satisfaction of the Fire Department.

and b) If any subsurface storage containers which appear to contain chemical wastes should be encountered during excavation on the site, construction would be halted pending investigation by the Hazardous Waste Section of the State Dept. of Health Services.

Soil near the tanks would be analyzed to determine whether any toxic material has leaked from the tanks. Should any toxic material be found, it would be dealt with after consultation with the San Francisco Health Department Bureau of Environmental Health and DHS. Workers would be warned of potential hazards associated with the tanks. Torches would not be used to remove any part of the tank equipment until any contents were analyzed and found to be nonflammable, in order to avoid the risk of explosion.

Impact. Electrical equipment containing PCBs is a hazard for persons working on the site.

Mitigation. Project sponsor would require the demolition contractor to check the site for transformers and capacitors containing fluid. The contents would be analyzed for the presence of PCBs. Any PCBs found would be disposed of in accordance with applicable regulations after consultation with the State Dept. of Health Services. All spilled and leaked PCB-containing material would be removed and appropriately disposed of prior to initiation of demolition in affected areas.

- Impact. Trucks hauling toxic material from the site could be involved in accidents which would spill the toxic material.
- Mitigation. Project sponsor would instruct the demolition contractor not to truck demolition spoils away from the site during rush hours, in order to minimize the risk of accidents involving potentially hazardous materials.
- Impact. Workers could be affected by the toxic materials on the site.
- Mitigation. Project sponsor would put provisions in the demolition contract stipulating a) that the contractor would comply with all applicable CalOSHA regulations and b) that the contractor would request a consultation from the CalOSHA Consultation Service in order to obtain safety advice prior to commencement of demolition. A CalOSHA permit is required for demolition, pursuant to Cal. Admin. Code, Title 8, § 341(3), which applies to demolition of all buildings more than 3 stories high.
- Legal control over the disposal of PCBs was established by § 6(e) of the Toxic Substances Control Act of 1976 (15 USC 1605). PCBs are designated as extremely hazardous wastes in § 66685 of the California Administrative Code, Title 22, Division 4. A special permit from DHS is required for the disposal of extremely hazardous wastes, pursuant to § 66570. During renovation of the

5-story building, elevator hydraulic systems would be examined for the presence of PCBs. If PCBs are found, the City Health Department and DHS would be consulted about appropriate action. EPA Status Report 8EHQ-0780-0352 indicates that elevators of the size found in this building may have PCBs in their hydraulic systems. DHS staff would supervise the removal of PCB-containing electrical equipment and any concrete or other materials on which PCBs have spilled.

F. Energy

Impact. The production of aluminum and copper is energy intensive.

Mitigation. Project sponsor would instruct the project architect to specify materials less energy intensive than aluminum and copper wherever possible.

Impact. Heat gain and loss through windows often determines the heating and cooling needs of a building.

Mitigation. Windows on the west side of the proposed project would be double pane glass which would decrease heat loss from units during colder months. Heating season energy savings from use of double pane glass are given in the following table. Because these windows would not be openable, a mechanical ventilation system would be required. The energy required to operate this ventilation system would partially offset the energy savings from the double pane glass.

TABLE 11: SAN FRANCISCO HEAT LOSS THROUGH SINGLE- AND DOUBLE-GLAZED WINDOWS

<u>Window Orientation</u>	<u>Heat Loss in BTU¹ per sq. ft. per year</u>		<u>Reduction in Heat Transfer</u>
	<u>Single-Pane</u>	<u>Double-Pane</u>	
North	49,600	25,600	24,000
East and West	43,900	23,700	20,200
South	41,700	23,200	18,500

Source: Adapted by Bendix Environmental Research, Inc. from Dubin, Fred S. and Long, Chalmers, G., "Energy Conservation Standards for Building Design, Construction, and Operation." McGraw-Hill, 1978, p. 123.

¹ See definition of BTU on page 71.

Impact. Energy used by the project would deplete nonrenewable resources.

- Mitigation. At least 50% of the energy required to heat the swimming pool would be derived from passive or active solar heating. Project sponsor would instruct the project architect to investigate use of solar panels for domestic hot water heating on south facing roof slopes. Any decision on the use of solar collectors would be made on the basis of cost effectiveness prior to detailed roof and plumbing design.

Before making a decision on the use of solar collectors, project sponsor or architect would contact the State Solar Business Office in Sacramento regarding experience with solar design of other multifamily projects or instruct project architect to do so.

If project sponsor should decide not to use solar collectors, he would instruct project architect to consider the following measures:

1. Incorporation of passive design features to minimize summer solar heat gain and maximize winter solar heating.
2. Design of as much of the roof areas as possible, within Planning Code height limits, at an angle appropriate for future solar collector installation.
3. Design of roofs with access for future solar collector installation and maintenance.
4. Design of buildings to take the weight of future solar panels.
5. Specification of plumbing connections appropriate for future solar installation. (As now required in Santa Clara County).¹⁰
6. Provision of space for a solar heat transmission fluid storage tank and controls or installation of same initially. (The collectors, not the tank and controls, are the most expensive portion of a solar installation.)
- 7. Reuse of swimming pool water to decrease both water consumption and energy use associated with water use.

Impact. Space heating and cooling use nonrenewable energy sources.

Mitigation. Project design will conform to the California energy insulation standards (Title 24, California Administrative Code) for new buildings. In 1976 it was calculated that the payback period for the required insulation was 7-10 years.¹¹ All hot water pipes will be insulated with a nonasbestos-containing material to reduce heat loss.

Impact. Low ventilation rates designed to reduce energy consumption allow buildup of toxic gases in building air.

Mitigation. Ventilation system(s) for the ventilated portion of the project on Kansas St. would be designed to provide no less than 0.5 air changes per hour so that indoor concentrations of any potentially toxic gaseous materials would be expected to be no greater than levels in older, less airtight, buildings.

Impact. Developments in which users are not individually billed for utilities tend to have higher energy and other resource consumption than those with individual meters.

Mitigation. Project sponsor would consider individual metering of water, gas and electricity for the units. The decision would be made before detailed plumbing plans are completed.

G. Structural Safety

Impact. Structures designated for retention may not be earthquake safe.

Mitigation. The buildings and walls designated for retention, shown on Exhibit No. 3, page 6, were built prior to the existence of present seismic safety provisions in the San Francisco Building Code, and their potential stability in an earthquake is unknown. The Bureau of Building Inspection would require that these walls and the 5-story building be brought into conformity with present Building Code provisions, if necessary.

Impact. Movement of the retaining wall could endanger structures next to the wall, sidewalk safety, and utilities in Rhode Island Street.

Mitigation. Project sponsor would retain a California licensed engineer to examine the retaining wall, consult with the Department of Public Works, and make recommendations regarding strengthening or replacement of the retaining wall, if needed.

Should replacement of any part of the wall be necessary, this would be done with care to maintain the integrity of Rhode Island Street and its subsurface utilities.¹²

The Department of Public Works would review the disposition of the retaining wall, and structural engineers in the Bureau of Building Inspection would review design of buildings against the wall before issuance of building permits.

- Project sponsor would put a provision in construction contracts requiring contractors to request a consultation with the CalOSHA Consultation Service prior to commencement of construction to insure that safe practices are used in dealing with the retaining wall and other aspects of construction on the site.

- H. Traffic

Impact. Delivery trucks could affect traffic on 23rd St.

Mitigation. Project sponsor would request commercial tenants to schedule deliveries at non-rush hour times whenever possible. Project sponsor would request the Department of Public Works to evaluate the need for a yellow loading zone near the commercial space.

Notes: Mitigation Measures

1. STC = sound transmission coefficient, the ratio of transmitted to incident sound energy, a means of characterizing the noise insulation characteristics of materials.

2. Charles M. Salter, P.E., 2222 Ltd. EIR Acoustical Report, 28 August 1980.

3. Technically, the Ordinance prohibits activities producing more than 5 dBA above ambient noise levels at the nearest property line. In some cases the Dept. of Public Works issues special permits for night construction. This would be unlikely in a residential area.

4. Telephone conversation with EIR subconsultant Selina Bendix,
30 June 1980.

5. Dr. David J. Storm, Regional Administrator of the Hazardous Materials Management Section of the State Dept. of Health Services, in a letter to the Dept. of City Planning, Office of Environmental Review, dated 4 December 1980.

6. Applicable procedures are in a State Health memo of September 1977, available for public review at the Department's Office of Environmental Review, 45 Hyde Street, Room 319.

7. Applicable regulations are found in Title 8 of the California Administrative Code, BAAQMD regulations and the previously cited OSHA regulations.

8. Chief, Epidemiology Section, telephone conversation with Selina Bendix, 1 August 1980.

9. Drums of possibly hazardous materials and pesticide containers were absent from the site at the time of EIR consultant field check on 25 November 1980.

10. Ordinance Requiring Solar Hot Water Heater for Residential Domestic Use, NS1208, adopted 23 June 1980, effective 1 February 1981. Bob Sturdivant, Senior Planner, Santa Clara County, telephone conversation, 18 February 1981.

11. California Department of Housing and Community Development, Division of Codes and Standards, "Energy Design Manual for Residential Buildings," 19 April 1976, Preface. San Francisco would be expected to be at the long end of this range due to its relatively even temperature compared to the rest of the state. Energy costs have probably increased more rapidly than estimated in 1976, so the payback period would be expected to be less than 10 years.

12. Cormac Brady, Senior Mechanical Engineer, Department of Public Works, has indicated that replacement of the retaining wall would have to be done carefully to avoid damage to sidewalk and street. Telephone conversation with EIR subconsultant, Selina Bendix, of 25 November 1980.

VI. ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED IF THE PROPOSAL IS IMPLEMENTED

A. Land Use

Rezoning would increase the permitted density on the site.

B. Noise

During project demolition and construction phases which are expected to total about 21 months, there would be a temporary increase in noise levels in the project vicinity.

C. Energy

Operation of the proposed 132 dwelling units and 8,500 sq. ft. of commercial space on a site that currently uses no energy would increase consumption of electricity and natural gas by about 14,000 therms of gas per month and 41,000 kwh of electricity per month.

D. Air Quality

The proposed project would be 71 meters closer to the freeway than the distance recommended by the Bay Area Air Quality Management District for residential development.

E. Toxic Substances

Occupants of the proposed project may come in contact with hazardous polyaromatic hydrocarbons which are probably present inside the incinerator (see Mitigation Measures, page 90).

VII. ALTERNATIVES TO THE PROPOSED PROJECT

Three alternatives, in addition to No Project, have been selected for analysis in this EIR.

A. Low Density Alternative

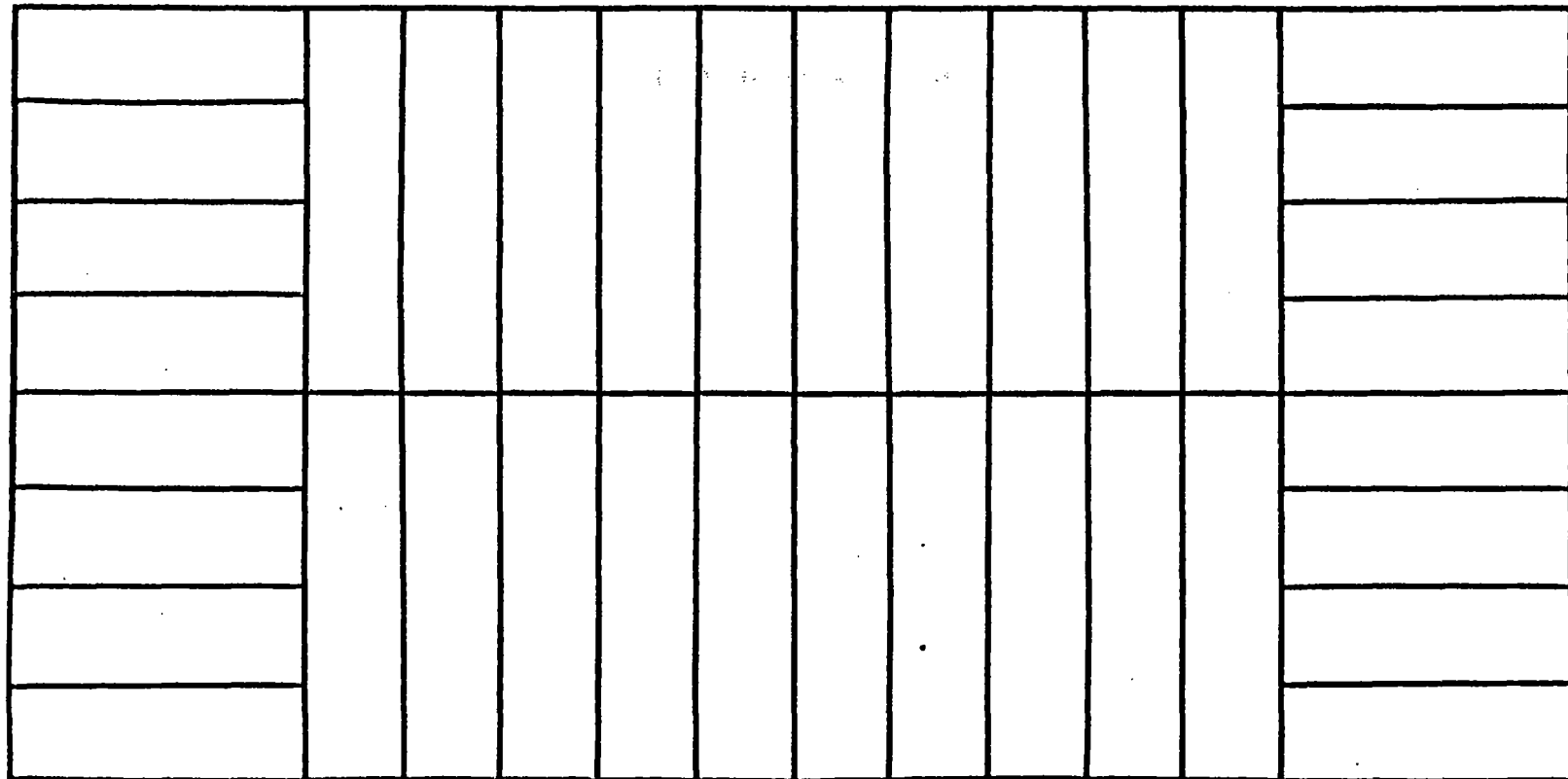
The entire site could be cleared and replaced with dwellings consistent with the existing RH-2 (Residential, House, Two-Family) zoning. Using a mix of 25 by 75 ft. and 25 by 100 ft. lots, it would be possible to divide the 200 by 400 ft. site into 36 lots. Under the Planning Code RH-2 maximum of 1 unit per 1500 sq. ft. with a Conditional Use Permit, 53 units could be built on the site. With 36 lots this would give a mix of 17 duplexes and 19 single-family residences. With a PUD and Conditional Use, 53 units could be built with common open space. (See Exhibit 23, page 100.) The units could probably have 2 or 3 bedrooms.

The sale price of the units would have to be higher than for the proposed project, because there would be fewer units requiring a greater yield per unit for a positive return on the sponsors' investment. These units would not reflect the reduction in cost per unit from rehabilitation of the two structures retained in the proposed project.

While it would maintain the neighborhood character, this alternative would create fewer housing opportunities for ownership for area residents, because the smaller number of units would be higher priced and would not provide the range of household sizes of the proposed project.

Alternative A would comply more closely with Objective 2, Policy 1, of the Residential Element of the Master Plan than the proposed project, because the RH-2 density would be closer to that of the surrounding development. It would not meet Objective 4, "Minimize hardships caused by the increased cost of housing," because the units would be more expensive than those in the proposed project.

Kansas Street



24th Street

23rd Street

Rhode Island Street

Low Density Alternative

— Possible lot layout

0 25'



Exhibit No. 23

Alternative A would have smaller traffic impacts than the proposed project because it would generate fewer trips. This alternative would have greater parking impacts due to reduction of on-street parking spaces because of driveway curbcuts. Per unit parking demands would be greater for Alternative A because the owners of more expensive units would have more cars.

The energy consumption, water consumption, and solid waste production would be on the high side of 40% of that due to the proposed project as use would be slightly more than a straight percentage of the number of units because of 1) the larger average unit size and 2) the higher economic level of the occupants.

Removal of the chimney as an architectural reference point would eliminate an architectural resource and possibly expose construction workers and neighbors to the chemical compounds inside the chimney during demolition. Other waste disposal and potential toxicity problems would be similar to those anticipated for the proposed project.

This alternative was rejected because it would not be profitable to the project sponsor.

Subalternatives. If a duplex were to be placed on each lot, 72 units could be built. Units on the 25 x 75 ft. lots would tend to be small, probably with one bedroom. Energy consumption, water consumption, and solid waste production would be about 55% of that of the project. This subalternative was rejected for the same reason as stated above.

B. High Density Alternative

This alternative would cover the entire site and could be designed with or without commercial space. Units would surround a parking deck, as shown in Exhibit 24, page 104. Swimming and tennis facilities might be located on the roof of the structure. A total of 200 units could be approved for the site if its zoning were reclassified to RM-3 (Residential Mixed District, Medium Density). The Planning Code would require 200 off-street parking spaces.

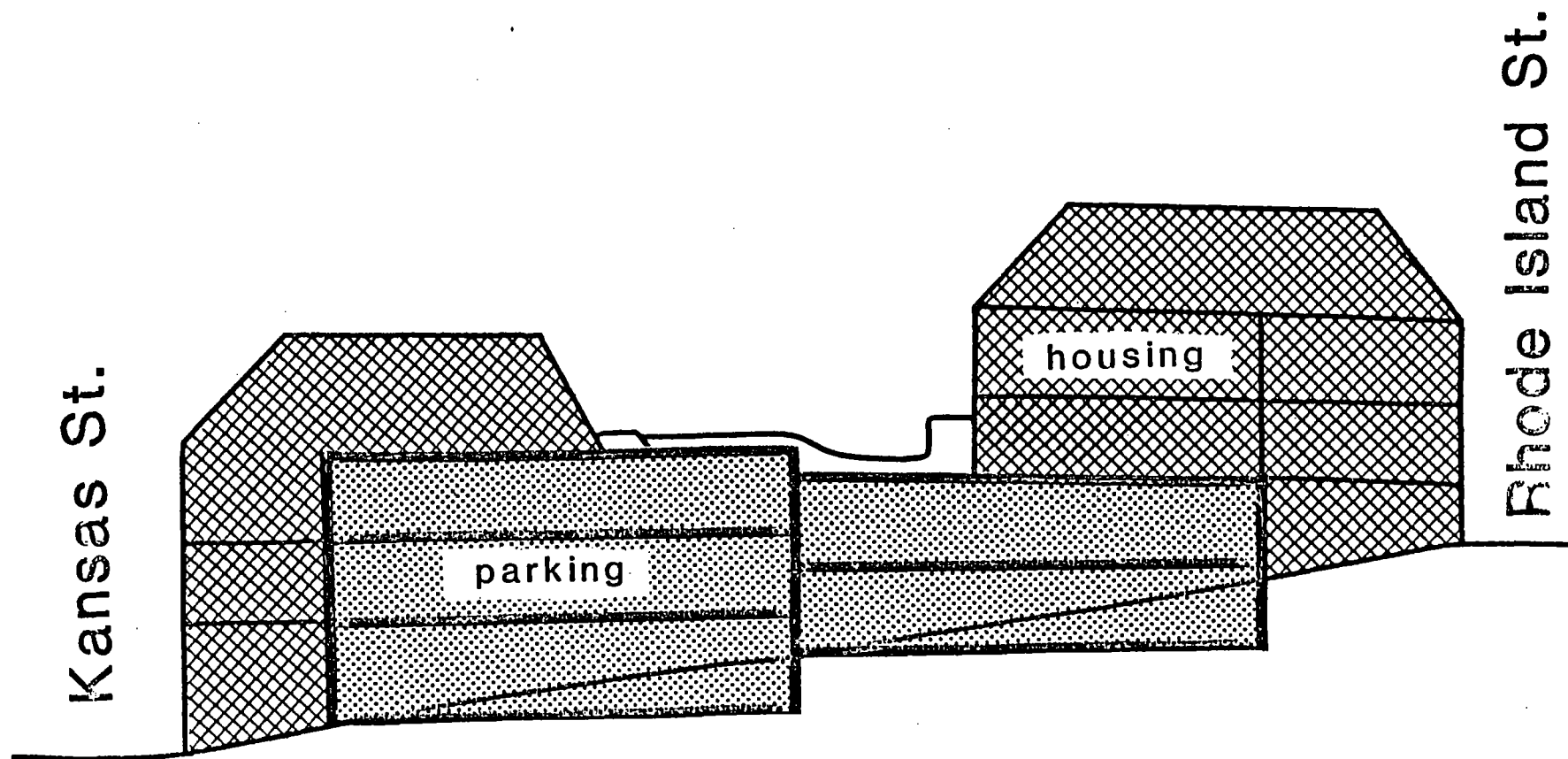
- The economic impacts of this alternative would be less than those of Alternative A, or the proposed project.

While this alternative would be in greater compliance with Master Plan policies regarding home ownership opportunities and larger-sized units than the other alternatives, the design would not conform to the character of present development in this neighborhood.

If no commercial space were included, this alternative would result in an average 500 weekday vehicular trips, 240 less than the expected 740 with the proposed project. Other impacts associated with such a project (for example, parking, water use and energy consumption) would be increased by about one-half because of the additional 63 units. If the same amount of commercial space as proposed were included, 370 additional trips per day would be expected, for a total of 870 trips. Adding 40 commercial and residential delivery trips would give 910 total trips or 22% more than the proposed project. Parking demand would probably saturate parking on the streets bounding the project.

This alternative was rejected because it would be out of scale with the neighborhood and project sponsor considers that approvals would be more difficult to obtain.

Subalternative. If 20 of the 200 units were to be designed for the elderly, this would decrease required project parking, for this alternative, from 200 spaces to 184 and would probably decrease neighborhood parking impacts. This alternative was discarded for the reasons stated above.



High Density Alternative/Transverse Section

Not to scale

Exhibit No. 24

C. Mixed Housing Types Alternative¹

Alternative C would contain 132 units, evenly divided (44 each) among three types: market-rate units, moderate income units,² and low income³ rental units. This alternative would have the same number of units as the proposed project and would be built on the same site with a similar design. Market rate and moderate income condominiums would be combined with Section 8⁴ subsidized low income rental units owned and operated by the project sponsor or an independent entity created for the purpose.

HUD⁵ Section 8 funds could be used for family housing that contains no more than 20% 1-bedroom units and at least 5% 3-bedroom units. Section 8 is a rent subsidy program under which rent in excess of 25% of a low-income household's monthly income can be paid by HUD. The maximum rent for such units, called the Fair Market Rent (FMR), is given in Table 12, page 104. The proposed project would contain about 32% studios plus 1-bedroom units and 7% 3-bedroom units, so the unit mix would have to be shifted or a disproportionate fraction of the larger units would have to be Section 8 units. If the unit mix were shifted to more 2-bedroom units without changing the design (changing the design would decrease the amount of interior courtyard space), then room size in the units would decrease.

TABLE 12: MAXIMUM HUD FAIR MARKET RENTS

	<u>Elevator (2-4 Stories)</u>	<u>Walk-Up</u>
Studio	\$512	\$461
1-bedroom	612	534
2-bedroom	782	697
3-bedroom	961	849

Before approving a project such as Alternative C, HUD would consider the feasibility of the project, taking into consideration such factors as the number of subsidized units already in the area, the marketability of the project and the possibility of combining rental and sale units.

The 44 units of moderate income housing, to be affordable, could vary in cost depending on the size of the family and where in the 80 to 120% range household income might be. The limit of affordable housing cost for a moderate income household would be about 3 times the annual income, or \$85,000.⁶ In the proposed project some of the 1-bedroom units would be within this range and the rest of the units would be above the price range for moderate income housing.

Assuming that the unit mix were not changed, the 44 Section 8 units would have to be made up of 3 three-bedroom, 33 two-bedroom and 8 one-bedroom units, leaving 13 studios, 21 one-bedroom units, 48 two-bedroom and 6 three-bedroom units to divide between moderate and market rate housing. Further assuming the maximum cost of \$85,000 for all the moderate income units, regardless of size, as a rough estimate the maximum sales income from the market rate and moderate income units would be as shown in Table 13.

Income from the sale of the 88 condominium units would be about half of the income of the proposed project, and would cover about 60% of development costs.

Assuming that HUD maximum rents would be charged in all the rental units and making conservative cost estimates, net rental income would be as indicated in Table 14, page 107.

Assuming constant 1981 dollars, it would take about 23 years to pay the remaining 40% of the cost of the development, without taking into account financing costs. In the first 20 years net rent would be \$5,020,000, leaving a minimum loss to project sponsor in 20 years of roughly \$780,000; debt service would be an additional loss.

Project sponsor has rejected this alternative as economically unfeasible.

TABLE 13: ALTERNATIVE C MAXIMUM POSSIBLE SALES INCOME

	<u>Alternative C</u>		
	<u>Moderate Income</u>	<u>Market Value</u>	<u>Proposed Project</u>
No. studio units/ \$ per unit	6/\$85,000	5/\$106,000	13/\$106,000
No. 1-bedroom units/ \$ per unit	10/\$85,000	11/\$ 82,000	29/\$ 82,000
No. 2-bedroom units/ \$ per unit	24/\$85,000	24/\$133,000	8/\$133,000
No. 3-bedroom units/ \$ per unit	3/\$85,000	3/\$191,000	9/\$191,000
Total units/total \$ sales value	44/\$3,740,000	44/\$5,200,000	
Alternative totals	88/\$8,940,000		132/\$16,200,000

TABLE 14: MAXIMUM POSSIBLE SECTION 8 INCOME PER YEAR

	<u>\$ Monthly Rent</u>	<u>\$ Annual Rent</u>	<u>Net Annual Rent</u>
8 one-bedroom units	\$ 4,270	\$ 51,300	\$ 36,000
33 two-bedroom units	23,000	276,000	193,000
3 three-bedroom units	2,500	31,000	<u>22,000</u>
Total annual net rent			\$251,000

Alternative D. AB 1151 Bonus

AB 1151, enacted by the California Legislature in 1979, provides that any multi-unit housing project over 5 units may be granted a 25% density bonus, automatically, if 25% low or moderate cost housing units are included, regardless of local zoning laws. In this Alternative the 25% bonus is added to the proposed 132 units, for a total of 165 units. Unit mixes have been set at the same proportional mix of types as the proposed project.

Unit numbers, prices and income are given in the table below. Project costs and income would be approximately equal so that it seems unlikely that sponsor would make any profit on this alternative. Project sponsor has rejected Alternative D for this reason. Demolition impacts of this Alternative would be the same as for the proposed alternative. Impacts that are a function of the number of units (e.g., traffic) would be about 25% greater than those of the proposed project.

The design of this alternative could be similar to that of the high-density Alternative C, or similar to that of the proposed project but with a smaller central open space. In either case, the need for a new design would increase costs and delay the project. Delay would increase financing and other inflation-related costs. These added costs could have been avoided if a decision to select this alternative had been made at the inception of the project; however, the unfavorable economics of Alternative D eliminated it from sponsor's consideration at the outset.

TABLE 17: ALTERNATIVE D: PROPOSED PROJECT + 25% BONUS

A. UNIT TYPES AND PRICES

	Number of Units		Approximate Prices	
	Moderate	Market	Moderate	Market
Studios	3	13	\$85,000 ¹	\$106,000
One-Bedroom	7	29	82,000	82,000 ²
Two-Bedroom	20	81	85,000	133,000
Three-Bedroom	<u>3</u>	<u>9</u>	85,000	192,000
Subtotals	33	132		
Total Units	165			

B. COMPARISON OF COSTS AND INCOME TO PROPOSED PROJECT

	Alternative D		Proposed Project	
	Moderate	Market	All Market ³	90% Market/ 10% Moderate
Studios	\$ 255,000	\$ 1,378,000	\$ 1,378,000	\$ 1,357,000 (12/1) ⁴
One-Bedroom	574,000	2,378,000	2,378,000	2,378,000 (26/3)
Two-Bedroom	1,700,000	10,773,000	10,800,000	10,400,000 (73/8)
Three-Bedroom	<u>255,000</u>	<u>1,728,000</u>	<u>1,728,000</u>	<u>1,621,000</u> (8/1)
Subtotals	\$2,784,000	\$16,257,000	\$16,284,000	\$15,756,000
Rounded Totals	\$19,000,000		\$16,300,000	\$15,800,000
Construction Cost	\$19,000,000		\$14,700,000	\$14,700,000
Income/Cost Ratio	1.0 ⁵		1.10 ⁵	1.07 ⁵

¹ The limit of affordable housing cost for a moderate income household, see EIR page 105.

² Note that the average price of these units is below the present moderate limit; therefore, as now planned the proposed project includes at least 14, or 11% moderate units.

³ Note that the proposed all-market-rate development actually includes at least 14 moderate, one-bedroom units. In the 90/10 alternative in the next column 10% of each type of unit is in the moderate class.

⁴ No. of Market Units/No. of Subsidized Units.

⁵ Note that these are approximate calculations with a probable error of about 10%.

Notes: Mixed Housing Types Alternative

1. This is similar to an alternative proposed by the Potrero Hill Community Development Corporation at a 7 July 1980 meeting of the Potrero Hill Advisory Committee.

2. Moderate income households are defined by HUD as households whose income is between 80 and 120% of the HUD-determined median income (\$23,400) for the San Francisco Standard Metropolitan Statistical Area (SMSA). A family of 4 with a household income between \$18,700 and \$28,100 would currently qualify as moderate income.

3. Low income is defined by HUD as households whose income does not exceed 80% of the median income for the SFSMA, as determined by HUD. Median income for a family of 4 is currently \$23,400 per year. A family of 4 with a household income of up to \$18,720 per year would currently qualify as low income. HUD expects these figures to be revised in July 1981.

4. Section 8 of the Housing and Community Development Act of 1974, usually referred to as "Section 8."

5. HUD information in this section is from a telephone conversation between EIR consultant Kreines and Kreines and Steve Grossman, Housing Representative, San Francisco Area, HUD, 3 February 1981, except where otherwise indicated.

6. Robert Jolda, Economist, Economic and Market Analysis Division HUD, San Francisco Area Office, telephone conversation with Bendix Environmental Research, Inc., on 11 February 1981. This limit drops during periods of high interest rates so it is possible that none of the units in the proposed project would qualify as moderate income.

7. Assuming 10% management cost, 5% repair and maintenance cost, 10% utility cost, and 5% taxes.

D. No Project

The no project alternative would be inconsistent with the Master Plan, Residence Element, policy to "Encourage the conversion of underused non-residential land to residential use....," would provide no housing, and would yield no profits to the sponsor. There would be no construction or operation impacts associated with new development.

Deferral of a development decision would leave options for use of the site open for the future. Because this site is surrounded on 3 sides by residential development, it is unlikely that a new industrial use would be considered appropriate there. As there is commercial development 3 blocks east and west of the site, it is also unlikely that an entire block of commercial use would be considered by developers interested in the site. City policy, both in the Master Plan and in Proposition K, approved by City voters on November 4, 1980, encourages provision of new housing in the City. Whenever the decision is made to permit development of the site, residential or residential plus commercial development are the uses most likely to be approved. See Impacts Chapter Section M. for future construction in San Francisco.

The site is now vacant, and recent vandalism is evident throughout the interior of the structures. As there are hazardous substances, such as asbestos and PCBs, on the site, the property could have greater impacts on human health and safety with the no project alternative.

SUMMARY OF COMMENTS AND RESPONSES

List of Commentors

Jim Firth, Potrero Hill League of Active Neighbors, president, oral comments.

Lee Brown, representing Local 2 of the Culinary Workers Union and the Coalition of Black Trade Unions, oral comments.

Patricia Sands, neighborhood resident, oral and written comments.

Paulette Faison, Potrero Hill Public Housing Tenants Association, president, oral comments.

Christopher Sabre, neighborhood resident, oral and written comments.

Jim Queen, Potrero Hill Community Development Corporation, executive director and neighborhood resident, oral and written comments.

Ron Dicks, Potrero Hill Community Development Corporation outreach director and neighborhood resident, oral comments.

Bob Bradford, representing the Potrero Boosters and Merchants Association, oral comments.

C. Mackey Salazar, San Francisco Planning Commission, oral comments.

Toby Rosenblatt, San Francisco Planning Commission, president, oral comments.

Charles Q. Forester, Director of Planning, Association of Bay Area Governments, written comments.

James Faye, Potrero Hill resident, written comments.

Jean Loura, Potrero Hill resident, written comments.

Theresa G. Rumjahn, California Regional Water Quality Control Board, San Francisco Bay Region, written comments.

David L. Storm, Ph.D., Regional Administrator, Hazardous Materials Management Section, California Department of Health Services.

Lawrence Goldberger, Director, Housing Division, San Francisco Area Office, Department of Housing and Urban Development.

Comment and Response Topics

Comment summaries are organized by topic according to the list below. Commentors' names are in parentheses after the comments.

	Page
1. Project Description.....	3
2. Toxic Materials Safety.....	5
3. Traffic.....	13
4. Energy.....	19
5. Density and Bulk.....	20
6. Zoning and the Neighborhood Plan.....	21
7. Economics and Employment.....	22
8. Victoria Mews.....	34
9. Mitigation Cost.....	36
10. Notification.....	36
11. Department of City Planning Staff-Initiated Text Changes.....	36

1. Project Description

COMMENTS

"On page 42, line 7, there is a reference to a hollowed square building and that needs defining. I don't understand what that is." (Commissioner Rosenblatt)

"I live two blocks up the hill, and I think the proposal is that...the low side of the project, is five stories high. If they could extend it five stories as it moves up the hill, which it doesn't do now, it would increase by whatever that elevation is, which I roughly estimate would take out quite a bit of the vision out of my front window, and I wouldn't be able to see out of that window any longer, and I live quite a bit up the hill." (Christopher Sabre)

"On page 39, at the very bottom, there is an indication that the main portion of the building at 24th and Kansas is about 60 feet tall, and at some point in the project description, that should be made clear. It discusses it here in the context of a regulatory item, but it should be up earlier in the project description. (Commissioner Rosenblatt)

"On page 41, at the end of the first paragraph, it describes the existing building as being in neighborhood scale because it has been there. Scale is not a matter of time. Scale is a matter of relative size. I think that needs clarification. (Commissioner Rosenblatt)

"On page 16, under "TABLE I. UNIT TYPES AND PRICES," I am assuming those are all market rates, and there should be an inclusion of the subsidized units in the event that public subsidies are found to be available." (Commissioner Rosenblatt)

"Not only is it a matter of identification of the poor people being moved out; in addition, 132 high-rise expensive units [are] being put in..." (Ron Dicks)

"The EIR does not address the type of commercial/retail uses to be housed on the site. In PLAN's letter to the City Planning Department (12-19-80) we requested that analysis be made of the types of uses in relationship to neighborhood service needs and impacts on existing nearby commercial uses. This question was not covered in the Draft EIR." (Jim Firth)

"On pages 1 and 4, should be a specification of the planned commercial space, how big, and what potential uses." (Commissioner Rosenblatt)

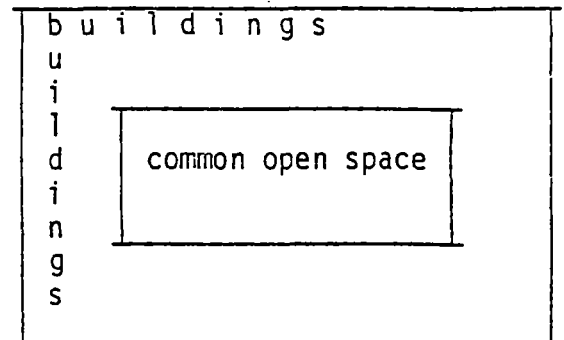
"I request that a study be done to determine what kind of commercial establishments the neighborhood needs and have these spelled out in the final EIR and plan." (Patricia Sands)

"I found this project, in terms of reading the EIR diagrams, very hard to read. I think it would be very useful if there was some kind of model, as simple as a cardboard box, something to give us a better sense of what it is going to look like, in three dimensions....That is not a requirement,

as far as I am concerned, for an adequate EIR. When it comes to the permit hearing, I think that would be useful." (Commissioner Rosenblatt)

RESPONSES

On page 42, line 7, "hollowed square building configuration" has been replaced by the following text starting at line 6: "to the extent that it would preserve the present height and bulk pattern and configuration of development at the perimeter surrounding central open space." (See diagram at right.) The word "although" has been deleted and a new sentence started with "Buildings."



Note that ¶ 3, EIR page 7, states "The buildings would be around the perimeter of the site, surrounding common open space which may include a swimming pool."

The only 5-story building in the proposed project would be the existing building at 24th and Kansas Streets. All new buildings would conform to the 40 foot height limit. Thus, any effects of the 5-story building on views exist now.

On page 1, ¶ 1, line 7, "60-foot-tall" has been inserted before "building." On page 4, ¶ 3, line 5, "5-story" has been added before "warehouse." On page 7, ¶ 1, line 4, ", approximately 60-foot" has been added in front of "building."

No high-rise units are included in the project (high-rise is usually used to refer to buildings over 6 stories). On page 4, the following sentence has been added at the end of ¶ 4: "These limits would not apply to the existing 60-ft. warehouse."

On page 41, ¶ 1, the last sentence has been deleted.

TABLE 1. UNIT TYPES AND PRICES, EIR page 16, has been revised as shown on page 5 of this document.

No one lives on the site; therefore, the project would cause no relocation.

The size of the commercial space is described on DEIR page 1, ¶ 1, line 2 and page 4, ¶ 3 as 8500 sq. ft. The following ¶ has been inserted on EIR page 7, after ¶ 1: "The project sponsor's first choice for the commercial space would be a grocery. The commercial space may be subdivided into 2 or 3 units. Tenants which would be considered include cleaners, laundromat, beauty parlor or neighborhood restaurant. Potentially disturbing uses such as a disco or bar would be excluded. The condominium agreements would include an indication that the commercial uses would be limited to neighborhood-oriented businesses which would not produce noise or fumes or otherwise

TABLE 1. UNIT TYPES AND PRICES

Unit Types	No. of Units		Expected Prices (March 1981 Dollars)
	Market	Subsidized*	
Studios	13	1	\$ 99,000 - \$113,000**
One-Bedroom	29	3	71,000 - 93,000
Two-Bedroom	81	8	99,000 - 167,000
Three-Bedroom	9	1	172,000 - 209,000
	<u>119</u>	<u>13</u>	

Total Units 132

* 10% of the units would be subsidized if a subsidy is available; all units would be market-rate without subsidy. The maximum price for a subsidized unit would be about \$85,000, regardless of size. See further discussion of housing subsidies on pages 30 to 34.

** Prices of studio units would exceed prices of 1-bedroom units because the studio units would be larger.

interfere with the residential character of the project." A survey of neighborhood commercial use needs is beyond the scope of the EIR for this project.

The closest commercial use in the neighborhood is the grocery at Kansas and 23rd Sts. across the street from the site. A new grocery could take some patronage away from the existing store. It is not possible to predict how patronage by residents of the new units would split between two groceries. The proposed project would provide new patrons for the existing store, which could offset losses in present patronage.

A model of the project will be available for the conditional use hearing before the Planning Commission.

2. Toxic Materials Safety

COMMENTS

"Toxic Waste Impacts -- although the EIR is very thorough in addressing this issue, we question the adequacy of the proposed mitigation measures. We question the toxic waste impacts and air pollution impacts on human health and safety during site preparation, construction and habitability for future residents, as well as neighbors including patients at S.F. General Hospital." (Jim Firth)

"I am also very concerned about the toxic waste on the site, and I would like to see, before anything be done on this project, that all the mitigating measures be spelled out....There are several places in the report where the term of 'appropriate regulations' is used....I happen to work for lawyers and I know what 'appropriate regulations' mean. It means a way that you can shove things under the rug. We have a right to know what regulations are being referred to. I would like to have them spelled out." (Patricia Sands)

"I request that...compliance with all safety measures and regulations be insured." (Patricia Sands)

"I would also like to see that the appropriate state officials, whether they be OSHA or the Department of Industrial Safety, be on site for all demolition, site clearance and construction." (Patricia Sands)

"I...request that the appropriate local or state officials, including the Environmental Health Inspector of the S.F. Dept. of Health, the Hazardous Materials Management Section of the Calif. Dept. of Health Services, and a representative from the Bay Area Air Quality Management District, be on site for the demolition, site clearance and construction phases of the development to insure the health and safety of the neighborhood and the workers on the site." (Patricia Sands)

"The subject report states that there are 5 hazardous waste, or Class I, disposal sites in the Bay Area (page 68). However, within this Regional Board's jurisdiction there are only 3 Class I sites and 2 Class II-1 sites which may receive limited types of contaminated materials. The project sponsor should be aware of the appropriate disposal sites and should remain in close contact with the State Department of Health Services and the Regional Board on the issue of hazardous waste disposal." (Theresa G. Rum-jahn)

"The toxic problems on the site, could be hazardous to the whole neighborhood, not only from dispersal of particles. Many of these chemicals have very low flash points, with the whole site exploding, and I will not feel comfortable with this project until we are assured in every way possible that it will be done safely." (Patricia Sands)

"They call for the removal of toxic waste out of the building. I want to know what street they are going to use, what time they are going to bring the stuff out, where they are going to take it, and how it is going to be disposed of." (Ron Dicks)

"We don't want any type of condition approved where the Potrero Hill people are going to be exposed to toxic material. So I think this plan as proposed by the developer calls for [strict] scrutiny on our part." (Ron Dicks)

"I identify and sympathize with many of the comments that were made relating to the safeguard and the protection that certainly has to be made regarding any of the materials that are a carry-over, toxic materials that might be left as a result of [the] Dutch Boy Paint factory." (Bob Bradford)

"On page 55 of the EIR it states that it is "probable that some toxic material is contained in dust and deposits on interior surfaces of some of the buildings to be demolished." It further states that material on the walls of one of the buildings south of the incinerator contains 60% asbestos. We feel that the developer owes the community a detailed explanation as to how they propose to safely demolish those structures." (Jim Queen)

"On the next page [90], at the top line, it indicates that the incinerator would be boarded up. That creates images of two-by-fours kind of nailed up on the side. I suspect that this is not what is intended. It ought to be more specific." (Commissioner Rosenblatt)

"There is a proposal inside the EIR that calls for sealing up toxic wastes on the property....I know I would have a problem if somebody was trying to sell me a condominium that has toxic waste sealed up on the property.... In case of any type of earthquake, be it minor or major, I don't know what that is going to mean, not only for the people living in Potrero Hill, but in all of San Francisco." (Ron Dicks)

"I would be concerned if, three blocks from my house, there was toxic waste being stored and there was an earthquake. I would be wondering what was happening here." (Ron Dicks)

"On page 89, the last paragraph, discussing the material that's inside the incinerator, it raised the question about the soil possibly being contaminated, but I don't believe that there was anything later on that dealt with the question of whether -- if that happens and that incinerator is retained and just closed off, is there not a danger of continuing leakage into the soil, and what mitigation measures are necessary to prevent that?" (Commissioner Rosenblatt)

"The soil analysis done for the EIR is incomplete. 'Zinc, lead, and chromium were found to be above normal in samples other than the surface sample.' [EIR page 61] How much above normal? How does developer propose to determine how widespread zinc/lead are in soil? The questions surrounding the levels of lead and zinc present below topsoil demands serious attention and answers. The EIR report does address the situation that could possibly exist if lead reaches dangerous levels." (Jim Queen)

"On page 91, second full paragraph, there is a discussion about the soil under the depressed area of the concrete floor. It raises the question in my mind about the conditions of the soil underneath everything that is going to be retained. I didn't go back to check this whole section thoroughly, but it raises a question of how to determine what the condition of the soil is under those sections that are to be retained, and if there is any evidence of contamination, what is to be done about that?" (Commissioner Rosenblatt)

"Groundwater pollution from the site is not considered to be a problem at this time (pages 64-65). We do not anticipate any groundwater pollution problems provided contaminated materials are removed and disposed of properly, as specified in the mitigating measures section. The Regional Board should be notified of any additional groundwater information con-

cerning this project." (Theresa G. Rumjahn)

"I also felt uneasy about some of the mitigation measures discussed with respect to the toxic materials. In those specific instances where it indicates project sponsor is considering a mitigation measure, I would hope by the time we get to the permit process, that they have made all those decisions and the appropriate conditions are created." (Commissioner Rosenblatt).

"The toxic chemical issue scares me, as I believe it must frighten anyone in the vicinity. Others have dealt with this problem and I needn't go into it." (James Faye)

"You [the Office of Environmental Review] specifically asked if the February 1981 EIR adequately responds to the concerns covered in our letter of December 4, 1980. The February 1981 EIR does adequately respond to our [State Department of Health Services, Hazardous Materials Management Section] concerns." (David L. Storm, Ph.D.)

RESPONSES

Note that wherever the EIR states that the project sponsor "would" do something this means that if the project is approved the sponsor's action will take place. "Would" is used because the action would not take place if the project were not approved.

As indicated on EIR pages 54 and 91, most of the toxic and flammable wastes have been removed from the site in accordance with instructions from the State Department of Health Services (DHS) and in compliance with the California Administrative Code, Title 22, Division 4, Chapter 30, Article 5. "Hazardous Waste Hauler Registration" and Article 6. "Requirements for Management of Hazardous and Extremely Hazardous Wastes." Flammable materials with a low flashpoint in containers larger than 1 gallon have been removed from the site. The wording of the first mitigation measure on page 91 has been changed to "The project sponsor has removed..." in order to make clear that this action has been completed.

The required soil testing program, to follow demolition, and procedures for any removal of contaminated soil must be approved by DHS and implemented by sponsor before construction. A ¶ has been added on page 89 after ¶ 1: "Project sponsor would meet with a representative of the DHS Hazardous Wastes Section to discuss demolition procedures before completing the demolition contract, in order to insure that the contract adequately reflects the special nature of the site and to avoid potential delays due to lack of understanding of special demolition requirements by the demolition contractor."

Related mitigation measures have been added on EIR page 92:

"Impact. Trucks hauling toxic material from the site could be involved in accidents which would spill the toxic material.

"Mitigation. Project sponsor would instruct the demolition contractor not to truck demolition spoils away from the site during rush hours, in order to minimize the risk of accidents involving potentially hazardous materials.

"Impact. Workers could be affected by the toxic materials on the site.

"Mitigation. Project sponsor would put provisions in the demolition contract stipulating a) that the contractor would comply with all applicable CalOSHA regulations and b) that the contractor would request a consultation from the CalOSHA Consultation Service in order to obtain safety advice prior to commencement of demolition. A CalOSHA permit is required for demolition, pursuant to Cal. Admin. Code, Title 8, § 341(3), which applies to demolition of all buildings more than 3 stories high."

Page 96, ¶ 4. The following text has been added at the end of the paragraph: "Project sponsor would put a provision in construction contracts requiring contractors to request a consultation with the CalOSHA Consultation Service prior to commencement of construction to insure that safe practices are used in dealing with the retaining wall and other aspects of construction on the site." CalOSHA would not send staff to the site during demolition unless a complaint were filed. The Environmental Health Section of the San Francisco Health Department does not plan to have an inspector on site (Paul Schwabacher, after site inspection on 28 May 1981).

As indicated on EIR page 62, the highest lead value obtained was 24 times the maximum "normal" soil level. A table comparing observed soil toxic element values with normal soil values is in Appendix C, on EIR page 138.

On EIR page 92, a new paragraph has been inserted after ¶ 3: "Soil near the tanks would be analyzed to determine whether any toxic material has leaked from the tanks. Should any toxic material be found, it would be dealt with after consultation with the San Francisco Health Department Bureau of Environmental Health and DHS. Workers would be warned of potential hazards associated with the tanks. Torches would not be used to remove any part of the tank equipment until any contents were analyzed and found to be nonflammable, in order to avoid the risk of explosion."

The remaining known toxic materials on the site are polychlorinated biphenyls (PCBs) in electrical equipment (EIR page 92), possible residual paint ingredients in the upper levels of the building in the NW corner of the site (page 90), asbestos (page 88), and potentially toxic dust in the buildings (page 88). As indicated in the Mitigation Chapter, pp. 88-92, these materials would be removed in a manner designed to minimize the potential for human exposure or environmental dispersion. Material would be removed intermittently during the usual daylight work hours of the contractor selected for the demolition work. (See also mitigation measure at the top of this page.)

The OSHA Safety and Health Standards (29 CFR 1910) provide that all asbestos waste "shall be collected and disposed of in sealed impermeable bags, or other closed, impermeable containers" (§ 1910.1001(h)(2)). Asbestos is the commonest, possibly the only friable (crumbly) material on the site. In

addition to the building indicated on EIR page 88, insulation on some pipes consists of a friable material that probably contains asbestos. Paul Schwabacher, Assistant Director of Environmental Health, San Francisco Health Department, feels that other materials on the site are not dusty enough to warrant any special treatment other than water spray to control dust generated by the demolition operation (he indicated that water spray would probably be used to cool the materials and lower fire risk, in any case). He feels there is no need to bag anything other than the asbestos materials. (Comments made during site visit on 28 May 1981.) The demolition contractor is required to notify the BAAQMD about demolition of asbestos-containing materials. That agency will determine the need for site inspection at the time of notification.

Asbestos is designated as a hazardous waste in Title 22, Division 4, Chapter 30 of the California Administrative Code, § 66680. Section 66490(b) provides that "Hazardous wastes that are classified as Group 2 or Group 3 wastes pursuant to Sections 2521 and 2522, Title 23, California Administrative Code, e.g., asbestos, may be disposed of at disposal sites that do not require a Hazardous Waste Facility Permit pursuant to Section 66370 of this Chapter."

Demolition debris would be disposed of at a Class II or Class III solid waste disposal site, as adopted by the California State Water Resources Control Board, 2 March 1972 (see "Solid Waste Management And The Bay Area Future," 1973, p. 115, for further information about classes of wastes and waste disposal sites). Class II sites are used for construction and demolition materials such as wood, metal, glass and cardboard. Class III sites are used for construction and demolition wastes such as asbestos, earth, rock, concrete, plasterboard, glass and demolition material containing minor amounts of wood and metals. The choice of which Class II and III disposal sites would be used and of driving routes to these sites would be up to the demolition contractor. Class I, II and III sites are described in § 2510, 2511, and 2512, respectively, of Title 23 of the State Administrative Code. The classification of sites is based on geologic and hydrologic features of the disposal area and capability for protection of water quality. The categorization of wastes is based on the threat that they pose to water quality. Asbestos sampling and removal would be supervised by staff of DHS.

The beginning of ¶ 2, EIR page 68, has been revised to read as follows: "Materials on the site classified as hazardous must be disposed of at a special hazardous waste site. The Regional Water Quality Control Board has approved three Class I, hazardous waste disposal sites pursuant to § 14040(b) of the Porter-Cologne Water Quality Control Act. These sites are in the industrialized area of northern Contra Costa County and southern Solano County (Richmond Sanitary Service in Richmond, Industrial Tank Corporation in Martinez and Benicia). None of these sites accepts materials in drums...."

Some material may go to a Class II-1 site (Acme Landfill, Martinez, or Richmond Sanitary Service). Polluted materials to be deposited at a Class II-1 site must be approved by the Regional Water Quality Control Board (telephone conversation with Teresa Rumjahn, San Francisco Regional Water Quality Control Board, 22 May 1981). Class II-1 sites are sites which naturally or through modification are "capable of preventing lateral and vertical hydrau-

lic continuity between liquids and gases emanating from the waste in the site and usable surface or ground waters" (Cal. Admin. Code, Title 23, Chapter 3, § 2511).

The following ¶ has been added after the end of EIR page 92:

"Legal control over the disposal of PCBs was established by § 6(e) of the Toxic Substances Control Act of 1976 (15 USC 1605). PCBs are designated as extremely hazardous wastes in § 66685 of the California Administrative Code, Title 22, Division 4. A special permit from DHS is required for the disposal of extremely hazardous wastes, pursuant to § 66570. During renovation of the 5-story building, elevator hydraulic systems would be examined for the presence of PCBs. If PCBs are found, the City Health Dept. and DHS would be consulted about appropriate action. EPA Status Report 8EHQ-0780-0352 indicates that elevators of the size found in this building may have PCBs in their hydraulic systems. DHS staff would supervise the removal of PCB-containing electrical equipment and any concrete or other materials on which PCBs have spilled."

DHS and San Francisco Health Dept. representatives may enter the site at "any reasonable hour of the day" for inspection (California Health and Safety Code, § 25185).

The first sentence on page 90 has been modified to read: "Project sponsor would seal the incinerator to prevent contact by project residents with hazardous PAH-containing materials." and the following paragraph has been added after ¶ 1: "The opening in the base of the incinerator would be sealed in such a fashion that any material flaking off the inside of the incinerator could not get out and no one could reach in and peel off any of the black lining. The seal would not need to be airtight because PAHs are not volatile. Under these conditions, the potential for human exposure would be less than if the incinerator were demolished. Demolition would break up the lining into small pieces, thus increasing the risk of dispersion of the carcinogenic material in the air where people could breathe it. The entrance seal would be made in such a way that the arched shape of the opening would still be visible and the seal would not detract from the appearance of the chimney."

Earthquake vibration would first cause loose material inside the incinerator to fall to the bottom. Resultant contaminated dust would tend to be trapped inside the incinerator because of the seals at the top and bottom. If the incinerator cracked open, dust could escape. An earthquake strong enough to destroy the incinerator would be a disaster involving other multiple risks, orders of magnitude greater than exposure to carcinogenic dust. In case of an earthquake, the site would be more hazardous in its present condition than after demolition and construction because an earthquake could shake loose a cloud of dust containing toxic materials that would affect people downwind from the site and which could settle out onto houses and yards. So long as the existing chimney structure is not cut into and openings are sealed, no toxic dust would enter the air around the chimney.

As indicated on EIR page 90, possible contamination of soil in the southeast corner of the site could be due to particles settling out of stack gases

from the incinerator when it was in operation, not from leakage through the soil from the base of the incinerator.

The following text has been added at the end of ¶ 2, EIR page 90: "The interior of the incinerator is not in contact with the soil and PAHs would move relatively slowly through the soil if such contact were to exist. This is because they are not soluble in water and material from inside the incinerator would be in particles larger than many of the soil particles and would move with difficulty between the soil particles."

"The San Francisco Health Department has indicated a place where earth fill has been revealed by removal of floorboards by trespassers and requested that this soil be analyzed before demolition. Project sponsor would have this done."

As indicated on EIR page 91, possible contamination of soil under structures to be retained would be indicated by analytic results of samples near the buildings and from the depressed area under the 5-story building. In the case of any indication of potentially hazardous concentrations of toxic materials, holes would be drilled in the concrete slabs of the building to be retained to permit additional samples to be taken for analysis. If potentially hazardous levels of toxic materials were found under the building to be retained, mitigation measures would be required by DHS. Possible mitigation measures would include sealing the surface of the slab with a painted or sprayed layer or covering the slab with a plastic vapor barrier and a new layer of concrete.

The following text has been added after ¶ 3, EIR page 91:

"Should any information relevant to groundwater quality become available after demolition begins, Theresa G. Rumjahn, Sanitary Engineering Technician, Regional Water Quality Control Board, would be contacted. She would refer this information within the agency, per its operating rules."

Line 7 of ¶ 3, page 88, has been changed to read "Project sponsor would implement this measure." The next sentence in that paragraph has been deleted.

Until the concrete slab is removed, additional chemical analyses performed, and analytic results evaluated, it is not possible to decide what mitigation measures are needed for potential hazards related to subsurface toxic materials. Sampling for these analyses would be supervised by DHS staff.

The Planning Commission and the Department of Public Works will not approve the proposed project unless they believe that residents of Potrero Hill and any other persons affected by the project would not be exposed to toxic materials at hazardous levels. As indicated on EIR pages 90, 91 and 92, project sponsor would be in contact with DHS to insure its approval of procedures to deal with toxic or potentially toxic materials.

DHS staff would supervise demolition and site cleanup activities. If these inspectors should feel that the demolition contractor is not proceeding safely, they would have the legal power to stop all activity on

the site (Health and Safety Code, Chapter 6.5, § 25181).

3. Traffic

COMMENTS

"We also question the location of such dense residential use adjacent to an air pollution ridden freeway." (Jim Firth)

"Freeway access to the site from the South is at the Army Street exit. One would take that exit and follow Potrero Avenue to 23rd Street, turn right and proceed 4 blocks to Kansas Street. (Jim Firth)

"I would like to see a better traffic survey be done. I think this was a little understated, the matter of traffic that would be caused by this project. I think there is considerably more." (Patricia Sands)

"The 23rd Street bridge across Highway 101 is the main access to southern Potrero Hill. There is access from Army Street providing one is driving east on Army, but the traffic flow to the Hill is much less here than at 23rd Street. I think the traffic on 23rd is much heavier than outlined in the EIR...and I think the increased traffic caused by the proposed development would be greater than anticipated by the EIR" (Patricia Sands).

"There are a lot of problems in this area right now having to do with the traffic, you know....I am living right there, I can see a lot of these problems." (Christopher Sabre)

"San Francisco General Hospital has just opened up an emergency entrance a couple of years ago at 23rd Street. You have a bridge, which is the only access to Potrero Hill, or one of the few accesses to Potrero Hill via Potrero. It goes across 23rd Street." (Christopher Sabre)

"At the intersection of 23rd and Kansas Sts. there is a concentration of 5,170 vehicles per day (EIR pg. 28 para 3). This intersection is only a few feet from the emergency entrance of San Francisco General Hospital. I often drive down 23rd St. through that intersection. I have on more than one occasion had to back up to allow the bus to turn the corner. This gets very tricky when you have a line of cars behind you and there is an ambulance behind the bus. Yet, the developers of this project are proposing a commercial use at this intersection. This business would have no off street access. Plus, they want to put an entrance to a residential parking lot there." (Christopher Sabre)

"S.F. General Hospital's emergency entrance is on 23rd Street just across the bridge from the proposed development and the impact on access to the hospital should be taken into account." (Patricia Sands)

"Traffic on 23rd Street is already heavy. The addition of 161 cars from such development as proposed could cause problems, but commercial space with no provisions for off-street loading and unloading would cause problems; especially at the intersection of 23rd and Kansas Streets, where buses negotiating that corner stop traffic flow even now." (Jean Loura)

"We have two buses that have just been added that go across the bridge. The street has just caved in a couple of weeks ago. I assume it is from the amount of weight of traffic that is being placed on that street." (Christopher Sabre)

"There are problems with several streets on the south side of Potrero Hill of which you should be aware: 26th Street between Kansas and DeHaro has been closed indefinitely due to the hill sliding; 25th Street between Rhode Island and DeHaro is a narrow, steep street which now must carry two bus lines (the 35 and the 19) because of the 26th Street cave-in, and 25th Street is now beginning to sink; the same block of 24th Street is so steep as to be impassable; and DeHaro between 24th and 25th is currently a dirt road whose future is uncertain. The condition of these streets may not directly affect the proposed development, but they have a direct negative impact on the neighborhood as is, and I respectfully request these conditions be looked into and taken into consideration in your final determination. I have documentation of all of the foregoing paragraph which I would be glad to provide to you if you wish." (Patricia Sands)

"The Wisconsin Site is three blocks away and is now scheduled to have 119 one to three bedroom units built on it in the near future...I don't think 23rd Street can handle the traffic that would be generated by both proposed developments. I request that another traffic survey be done and that the additional units on the Wisconsin Site be included in the analysis of additional traffic caused by these developments." (Patricia Sands)

RESPONSES

The Bay Area Air Quality Management District (BAAQMD) has not received any complaints regarding air quality in the project area, including the latter part of the paint plant's full operational period (telephone conversation with Jack Bean, Senior Operations Officer, Enforcement Division, BAAQMD, 22 May 1981). See also EIR discussion pp. 54-58.

The last sentence of ¶ 1, EIR page 28, has been revised to read as follows:

"The connection from the south does not allow left turns from Army St. onto Vermont St. Therefore, freeway access from the south is more convenient at Mariposa St., from the Vermont St. exit 5 blocks north of the site, or from the Army St. exit (west to Potrero Ave., north on Potrero, and east on 23rd St. to the site)."

The following sentence has been added to the Transit paragraph on EIR page 30:

"The 19-Polk and 35-Eureka lines cross over the James Lick Freeway on the 23rd St. overpass, an entry route to the Potrero Hill area." Prior to 10 September 1980, the 19-Polk line was split into 2 service routes, one of which went to Potrero Hill. All 19-Polk buses now go to Potrero Hill. There are 12 coaches on this line from 9-4 pm and 14 during the peak at 4-6 pm. No changes have been made in 35-Eureka service in this time interval. (Susan Chelone, MUNI Planning, telephone conversation, 27 May 1981). A field check by Bendix Environmental Research, Inc. on Tuesday, 12 May 1981,

found that from 3:00 to 4:15, buses on the 19-Polk and 35 Eureka lines were about one-half full and from 4:15 to 6:00 they were about two-thirds full. Assuming peak project generation of 25 passengers per line and 5 buses per hour, the resulting 5 additional passengers per bus could be accommodated by the present schedule, as each 48-seat bus would have an average of 16 vacant seats. (See also EIR page 48, ¶ 2.)

Paragraph 4, page 49 has been revised as follows:

"On the streets bounding the project, the 3-6 pm parking demand from neighboring uses is 66 spaces which would leave 81 or 55% of the spaces for project-related parking. If the worst case demand for 42 off-site spaces should occur, this would leave 39 or 27% of the spaces available for party parking, etc. Within a 1-block radius of the site there are an additional 288 spaces. From 3-6 pm 153 or 53% are filled (field check by Bendix Environmental Research, Inc., 12 May 1981). Should parking demand from the proposed Wisconsin Street project extend as far as the area of the 2222 23rd St. project, 47% of this street parking would be available, should closer parking not satisfy the demand from the Wisconsin St. project."

The new traffic counts made since publication of the DEIR, and given in the table on page 16 of this document, are lower than the counts reported in the EIR. The EIR traffic discussion has not been altered, although given the new counts project-related effects would be expected to be less than those indicated in the discussion. The difference between the two sets of traffic counts indicates that present daily traffic variability is an order of magnitude greater than the predicted project-related traffic increase.

Traffic accident records for the project area are given in the table on page 17. The information in the table suggests that accidents in the project area are most commonly caused by speeding and are not due to traffic congestion.

As indicated on page 48, ¶ 3, the 23rd St. parking entrance would provide access to 16 parking spaces. This is not expected to affect average traffic flow on 23rd. St.

Provision of off-street loading/unloading space would reduce either the number of square feet of housing or the size and desirability of the project's central open space. Traffic interference due to delivery trucks could be minimized by scheduling deliveries at non-rush hour times or by provision of a yellow curb loading zone.

The following text has been added after ¶ 4, EIR page 96:

" H. Traffic

"Impact. Delivery trucks could affect traffic on 23rd St.

"Mitigation. Project sponsor would request commercial tenants to schedule deliveries at non-rush hour times whenever possible. Project sponsor would request the Department of Public Works to evaluate the need for a yellow loading zone near the commercial space."

TABLE 15. COMPARISON OF 2/4/81 AND 5/12/81 TRAFFIC COUNTS¹

Street	Date	Time	No. of Vehicles	Calculated Vehicles/hour	Notes
24th Street	5/12/81	3:00-3:15	3	12	Feb. count within range of May counts
	5/12/81	4:00-4:15	6	24	
	2/4/81	4:15-5:15	<u>2</u>	10	
	5/12/81	5:00-5:15	1	4	
Kansas Street	5/12/81	3:15-3:30	37	148	Feb. count about 40% higher than May counts
	5/12/81	4:15-4:30	37	148	
	2/4/81	4:15-5:15	—	210, 215 ³	
	5/12/81	5:15-5:30	38	152	
23rd Street	5/12/81	3:30-3:45	71	284	Feb. count about 45% higher than May counts
	2/4/81	4:15-5:15	—	446, 450 ³	
	5/12/81	4:30-4:45	78	312	
	5/12/81	5:30-5:45	75	300	
Rhode Island	5/12/81	3:45-4:00	9	36	Feb. count about 55% higher than May counts
	2/4/81	4:15-5:15	—	74, 76	
	5/12/81	4:45-5:00	12	48	
	5/12/81	5:45-6:00	10	40	

¹ Friday, 2/4/81 counts made by Richard K. Hopper, P.E.
Tuesday, 5/12/81 counts made by Bendix Environmental Research, Inc. (mid-block).

² one-hour counts only.

³ counted at 2 locations, differences due to cars parking or going into driveways between the ends of the block and/or to counting method.

TABLE 16. FIVE-YEAR TRAFFIC ACCIDENT RECORD FOR PROJECT AREA

Intersection	Date	Injuries	Time	Cause
23rd & Kansas	8/18/76	1	5:45 pm	speeding
	5/13/77	0	12:50 pm	backing along street
	9/15/78	1	1:55 pm	
	2/15/79	2	6:00 pm	
	10/13/79	0	9:15 am	tailgating
	6/14/80	2	8:20 pm	speeding
23rd & Rhode Island	3/20/77	1	*	drunk driving
	9/16/77	0	2:46 pm	improper turn
	10/29/77	0	*	parking on grades
	12/15/79	0	*	speeding
24th & Kansas	9/29/80	0	12:05 am	speeding
24th & Rhode Island	3/18/76	0	1:10 pm	parking on grades
	10/20/76	0	7:55 pm	speeding
	12/3/77	0	1:30 am	speeding
	4/25/80	0	3:20 pm	caused by pedestrian

Information from records at the Department of Public Works.

* Time information not available.

Regarding the collapse on 23rd St., a 12-inch water main on the 23rd St. bridge broke at about 9 am on 9 January 1981. Water from the broken pipe washed soil out from under the pavement and the street collapsed on the south side of the intersection of 23rd and Kansas Sts. The pipe was repaired on 9 January and the street was repaved the next day. (Edmund Brodie, Superintendent of Construction and Maintenance, San Francisco Water Department telephone conversation, 18 May 1981.)

Twenty-Sixth Street was partially closed between Kansas and DeHaro in about January 1981 and completely closed in about April because of slide damage on the south side of the street and drainage problems. Western Pacific Railroad owns this slide area and must stabilize the slope before the street is repaired. The City hopes to repair the street in summer of 1981 before the rainy season; the timing of repair depends on Western Pacific. (William Scruggs, Section Head, Structural Design Section, Bureau of Engineering, Department of Public Works, telephone conversation, 4 June 1981)

On page 46, sentence 2, ¶ 3 under Transportation, has been changed to read: "It is estimated that 60% of the projects' 59 peak hour trips, or about 35 trips, would be added, for a traffic increase of about 7% over the present peak hour traffic volume of about 520 vehicles on 23rd Street."

The 23rd Street emergency entrance to San Francisco General Hospital went into use in August 1976, when staff moved into the new facilities. The 7% predicted increase in traffic on 23rd St. would be less than the minimum 10% probable error of an individual traffic count. This means that the change could just as probably be a decrease or no change at all. The San Francisco Health Department Ambulance Service reports that it has had no difficulties with the 23rd and Kansas intersection (telephone conversation, Mr. Van Wort, 22 May 1981).

The peak traffic analysis on EIR page 46 assumes that 12% of the trips per day would occur during the peak afternoon hour. Examination of Department of Public Works traffic counts (by Bendix Environmental Research, Inc.), indicates a range of 9-12% of trips per day during the peak hour; therefore, 12% is a reasonable percentage to use for worst-case prediction. If the project peak of 88 vehicles/hour should coincide with the present peak of 520 vehicles/hour, rather than occurring later (as predicted on EIR page 46), assuming 60% (or 53) of these trips on 23rd St., there would be a 10% increase in traffic. This increase is of borderline significance statistically and would not be expected to change the present traffic Level of Service A. Note that it is not possible to derive intersection traffic counts by adding the separate counts for the streets that intersect because this double counts all vehicles that turn from one street into the other. Thus the 5170 figure referred to in the comment about the 23rd and Kansas Sts. intersection, is not correct. See Appendix B, EIR pp. 121-127 for intersection counts at peak hour.

The following text has been inserted as EIR page 47a:

"A proposal for development of 120 units on the former Wisconsin Housing Project site is under review by the Department of City Planning (EE 81.29). Using the same trip generation factor as for the 2222 23rd St. project (Table 7, EIR page 47), the Wisconsin St. project would generate approximately 310 trips in 24 hours compared with 740 for the project. (This assumes that there will be no commercial space in the Wisconsin St. project; commercial uses account for approximately half of the 2222 23rd St. project trips.) Assuming 12% of these trips to take place during the afternoon rush hour, about 40 peak hour trips would occur. If the time distribution of trips were like that of the 2222 23rd St. project, about 30 trips would occur during the afternoon peak hour in the area. If 60% of these trips were on 23rd St., about 20 trips would be added. Together with the 35 trips from the 2222 23rd St. project, this would give a cumulative increase of about 55 vehicles, an increase of 11%. This would probably change the conditions at the 23rd and Kansas Sts. intersection from Level of Service A to B during rush hour. According to the Department of Public Works definition, "Level of Service B describes a condition where the approach to an intersection is occasionally fully utilized and some delays may be encountered. Many drivers begin to feel somewhat restricted within groups of vehicles. The traffic operation can generally be described as very good." See EIR page 122 for other Level of Service definitions, for comparison.

"The Wisconsin St. project would generate a similar number of transit trips as the 2222 23rd St. project, or a total of about 10 persons per bus. The

approximately 11 empty seats remaining on these buses after allowing for patrons from the 2222 23rd St. project on these 48-seat buses would accommodate the additional passengers."

The last ¶ on page 30 has been replaced by the following text:

"There are 103 on-street parking spaces on the streets bounding the project. There are an additional 277 spaces within one block of the site on streets radiating from the project corners. During counts by Bendix Environmental Research, Inc. on 12 May 1981, 66 or 64% of the perimeter spaces were filled and 153 or 55% of the spaces on radiating streets were filled. Few cars were observed parking or leaving during the 3-6 pm period."

4. Energy

COMMENTS

"The Energy Section is weak in that it proposed only "possibilities" of using renewable energy resource systems such as solar and wind power. At the very least, solar hot water systems should be used on all new development throughout the San Francisco sunbelt, and wind-powered projects should be installed wherever feasible. Maximum insulation and double glazing should also be mandatory in this project." (Jim Firth)

"Potrero Hill is an excellent area for using both solar and wind energy. The analysis of wind energy generation in the Draft E.I.R. seemed understated. I believe both solar and wind could be harnessed to provide significant portions of the energy needs of the development." (Patricia Sands)

RESPONSES

At the cost level cited on EIR page 75, wind generators to supply the electrical needs of the project would cost about \$800,000, plus the cost of increasing the structural strength of the buildings to enable them to withstand vibration from the windmills. This would add \$7000 or more to the cost of each unit. Project sponsor has rejected this measure because of its cost, the time necessary to obtain enough wind data for the site to determine that average wind speeds are high enough to make wind generation possible, and possible City and neighborhood concern about the visual and noise impacts of a group of wind generators and their potential interference with TV reception. The Milbrae Planning Commission recently turned down a conditional use permit for a 60-ft., ground-based, windmill because of neighborhood concern about visual, noise and safety impacts (Millbrae Sun, 17 June 1981).

The following information has been added as the first sentence under Mitigation on EIR page 94: At least 50% of the energy required to heat the swimming pool would be derived from passive or active solar heating." In the next sentence "domestic" has been added before "hot water heating." On the same page, a new item-7 has been added: "Reuse of swimming pool water to decrease both water consumption and energy use associated with water use."

As indicated on EIR page 74, the cost of solar collectors to supply 60% of the hot water for the project would cost approximately \$120,000, about \$1000 per unit. The California Energy Commission estimates the cost of solar hot water for a home in Fresno at about \$2,500 (Overview of the Committee Proposed Residential Building Standards, April 1981, page 6). Assuming similar costs in San Francisco, the EIR estimate of \$1000/unit appears low.

The project would probably have to be redesigned to provide the 5,000 - 8,000 square feet of roof needed for collectors in the proper orientation. Project sponsor has rejected this mitigation measure on the grounds of design and delay-associated costs. Measures to facilitate future installation of solar collectors would probably cost 10% or less of the cost of complete installation of the collectors. The City Planning Commission could require such a mitigation measure as a permit condition. See mitigation measures 3 to 6, EIR page 94.

As indicated on EIR page 93, double glazing would be used on the western side of the project. According to project sponsor, the rest of the windows would probably not be double-glazed because of the cost (telephone conversation, Joseph Skiffer, 13 May 1981). The extent of use of double-glazed windows is under consideration and would be decided after issuance of a conditional use authorization and further consultation with a noise engineer. Residential portions of the buildings would be insulated in accordance with the requirements of the California Administrative Code, Title 24, Part 6, Article 1 Energy Conservation Standards for New Residential Buildings, adopted 30 January 1980. The commercial space would comply with Article 2, as required by § T20-1401(4)(b) on Mixed Occupancy. The Title 24 regulations allow the architect some flexibility in design measures used to meet energy performance standards, rather than requiring the use of specific design measures.

If the April 1981 California Energy Commission's "Committee Proposed Building Standards" should be adopted as proposed and become effective prior to issuance of a building permit for the project, the Energy Budget for Zone 3 (which includes San Francisco) would require a reduction of the estimated energy consumption (EIR page 72, gives a rough estimate, not based on a specific design) from 120,000 kBTU/unit/year to 30,000 kBTU/unit/yr (calculated from table on p. 22 of the proposed standards). This could be achieved by the use of various combinations of ceiling insulation, window treatment, etc. (Table 2c, page 26 of the proposed standards).

5. Density and Bulk

COMMENTS

"We also question the location of such dense residential use adjacent to an air pollution ridden freeway." (Jim Firth)

"One of the concerns that I have is the density. The amount of people or units that is being proposed for this project, seems to be well out of proportion for anything that is in the area, either public or private,

even Victoria Mews, which is an unusual project in itself." (Christopher Sabre)

"My neighbors and I are concerned about the proposed project at 2222-23rd Street because it would be completely out of character with the rest of the neighborhood. The sponsors of the project have not been realistic about the effect of this massive development...on the quality of life in the neighborhood." (Christopher Sabre)

"I am not opposed to development of this site. However, I am opposed to a zoning change at the site." (Christopher Sabre)

"I support Alternative C, mixed low/moderate/market rate units within the existing RH-2 zoning on the site as more suitable to the existing density and bulk of housing in the neighborhood and the capacity of the streets." (Patricia Sands)

RESPONSES

The Victoria Mews project includes about 900 sq. ft. of site per unit and the proposed project would have about 600 sq. ft. of site per unit. The same calculation without the 35 units in the existing building at Kansas and 24th Sts., which occupies 8,600 sq. ft., gives about 740 sq. ft. of site per unit. Assuming all duplexes, as an average, the blocks surrounding the project site are about 1100 sq. ft. per unit.

Alternative C would include 132 units. RH-2 zoning could permit 53 units with conditional use authorization. Restriction of the project to RH-2 zoning would decrease the number of dwelling units by 60% below both Alternative C and the proposed project, and would increase the subsidy necessary per unit required to sell units at below-market-rate prices.

Comments supporting or opposing the alternatives for development of this site may be addressed to the Planning Commission at the time of the hearing on the conditional use permit for the proposed project (2 July 1981).

6. Zoning and the Neighborhood Plan

COMMENTS

"1. Zoning - We oppose the project as being in violation of the Residential Zoning Study." (Jim Firth)

"It negates the guidelines stated by the Potrero Hill neighbors plan." (Ron Dicks)

"The proposal negates the Potrero Hill Neighborhood Plan which was adopted by the Planning Commission to assess housing needs in the Potrero Hill areaThe Potrero Hill Neighborhood Plan clearly calls for mixed-income housing on 2222 23rd Street." (Jim Queen)

"And, at the bottom [page 42], there is a reference to 'theme tree' -- and items - go back to check the neighborhood plans and see if we can define

that clearer, too." (Commissioner Rosenblatt)

RESPONSES

The Residential Zoning Study was implemented by the City through changes in provisions of the Planning Code. Projects, such as zoning changes and conditional use permits, which are permitted by procedures outlined in the City Planning Code, are not in violation of the policies of the Residential Zoning Study.

As indicated on EIR page 42, the project would be in conformity with some policies of the Potrero Hill Neighborhood Improvement Plan. This Plan states that "Effort should be made to ensure that all major housing developments are economically integrated in order to stabilize and enhance the mixed-income character of the community." (page 13). The lack of low income units in the proposed project would not comply with the intent of this statement. The efforts made to obtain subsidy funding to permit incorporation of low income units do comply with the statement (See pp. 30 to 33 of this document). A family earning about \$19,000 a year, the top of the HUD low-income category, could afford to buy housing at a maximum price of about \$58,000. It is questionable whether there is any housing for sale in San Francisco in this price range.

Map 10, page 49 of the Neighborhood Improvement Plan, "Proposed Land Use," shows the project block as Low Density Family Housing. The project would not conform to this proposed land use. No specific guidelines for development on this site, comparable to those given for the Wisconsin St. site, are included in the Plan. As indicated on EIR pages 41-42, the project is in compliance with policies of the San Francisco Comprehensive Plan such as conversion of underused non-residential land to residential use.

Page 25 of the Potrero Hill Neighborhood Plan states "Special theme trees would serve to announce the neighborhood entrances and help create a sense of community identity." Map 6, page 26, shows 23rd St. as a Neighborhood Entrance where such trees should be used. Theme trees are trees of a specific type selected to be used in various plantings to give identity and continuity to an area. As indicated on EIR page 82, "One street tree would be planted for each 20 feet of street frontage (over 60 trees), as required by the Planning Code." The Planning Department would be consulted as to the nature of the trees to be planted.

7. Economics and Employment

(including housing subsidy)

COMMENTS

"We are in the need of houses that we can afford to pay for." (Lee Brown)
 "Any time a government of this nation...can afford to spend billions and trillions of dollars, and the next few years it will move into trillions of dollars, setting up a defense force, and people have nowhere to stay. I think its a shame." (Lee Brown)

"We should not build any more condominium homes for...people that are able to pay \$90,000 for a place to live in, and \$100,000...when [other] people do not have a chicken coop to live in." (Lee Brown)

"There is an implication in the way this [Table 1, EIR page 16] is phrased of a decision having been made that...subsidies are not available. In that respect, I would hope that by the time we come to the permit hearing, ...we could have some very extensive discussions by the project sponsor and the Department about the research done as to whether subsidies were available." (Commissioner Rosenblatt)

"We urge the project sponsor and the appropriate city agencies to explore all sources of funding to develop low-moderate-market-rate units within the existing zone." (Jim Firth)

"We STRONGLY URGE you to support Alternative C: Mixed Housing Type in RH-2 zone, and join us in rejecting the proposed project which does not meet the housing needs of our community." (Jim Firth)

"The City's 'Housing Impact Fee' may provide a reasonable opportunity to implement this alternative, and provide a model for future affordable housing within existing neighborhood zoning districts." (Jim Firth)

"Perhaps the 10% housing impact fee now being levied on highrise developers would be a source for...subsidies." (Patricia Sands)

"I...urge all parties to use every means available to them to find funds for low and moderate subsidies." (Patricia Sands)

"On page 105, fourth paragraph, 'Direct sales income,' reorganize that sentence. I don't understand what the subject and the predicate are referring to." (Commissioner Rosenblatt)

"On page 120, 'Proposed Project Cost,' could we have a date in terms of when those estimates were made. In other sections of the document, selling prices, I believe, and others are indicated in terms of March 1981 prices. Could we have that date put on these, and if it isn't comparable, then revise these figures so they are comparable for the same date." (Commissioner Rosenblatt)

"The EIR failed to specify that the nearest RM-2 zoned site is public housing; no analysis is made on the socio-economic impacts of locating this project in proximity to public housing." (Jim Firth)

"There is a tremendous gentrification influence of the scheme." (Jim Queen)

"Another dilemma this project suggests is that as soon as the go-ahead is given, there may be a substantial increase in the speculation that has frequented the announcement of other such major developments throughout San Francisco neighborhoods....A project of this size is bound to have multiplier effects on the area--older buildings of all sizes will undergo change of ownership, renovation and subsequent displacement and higher

housing costs. Gentrification of the neighborhood will quicken, the racial-ethnic mix that presently exists will be shattered as only two and three income households and professional real estate practitioners will be able to afford the costs. Condo conversions will begin in earnest. (It should be the City's desire and will to discourage such displacement and homogenization of our neighborhoods.)" (James Faye)

"My major concern with this project, and numerous people in the neighborhood have expressed similar feelings, is that the purchase prices for these units will be far in excess of what most current Potrero Hill tenants could afford. As the proposed prices on page 16 of the Draft EIR stand now, they seem almost reasonable for today's crazed housing market (although it totally prohibits low-income tenants from participating and would just allow a two-income family a chance at getting in, if financing could be arranged.)" (James Faye)

"The big fear, however, stems from the improbability that these 1981 dollar prices will not increase dramatically as the construction nears completion. I fear the thought of studio units on Potrero Hill selling initially for \$150,000 and 2 or 3 bedroom units in excess of \$250,000. There obviously is no guarantee that the prices will remain in the developers' proposed bracket--perhaps this is merely a reality for the potential purchasers to deal with, but I cannot imagine how this will open up viable homeownership opportunities for low and moderate income folks, contrary to stated City policy." (James Faye)

"Will there be any effort by the developers to meet the minimum 10% set-aside for low and moderate income purchase? There is no mention of this in the EIR except that subsidies would be necessary to accomplish this. The developers, having rejected Alternative C as economically unfeasible (page 105), should at least try to secure this inadequate 10% set-aside (13 units). It appears that they have refused to do this." (James Faye)

"In the reading of the Socioeconomic section of the Environmental Impact Report, I don't see any statements in terms of the concerns that were expressed by some of the speakers here today, as to what is going to happen to the existing neighborhood, what kind of socioeconomic tensions will be created in there." (Commissioner Salazar)

"On page 102, in the second paragraph, that is not entirely clear to me why the socioeconomic impact would be the least of any alternative. They can never address that. The word 'some' needs to be specified. How many? What character? How do you go from that discussion to a discussion of the socioeconomic issues?" (Commissioner Rosenblatt)

"If you are going to discuss socioeconomic issues, you've got to do it thoroughly, or you shouldn't do it at all." (Commissioner Rosenblatt)

"ABAG's local elected officials promote a more complementary distribution of jobs and housing in the region to relieve transportation and commute congestion, alleviate impacts on air quality, and help reduce upward pressures on housing prices in communities near job centers. They urge that cities with job growth in excess of past housing growth accept

responsibility for providing more housing at price ranges and levels affordable to workers coming to these new jobs." (Charles Q. Forster)

"To this end, they have agreed upon the following policies which are related to the 2222 23rd Street proposal:

Increase housing production to match anticipated employment growth, new household formation, and the capacity of local communities to provide needed public facilities and services."

"Promote higher density development, increases in the supply of land available for residential use, and use of development incentives to increase the supply of housing at locations well served by existing or planned services and accessible to job centers.

"According to ABAG projections, San Francisco had 306,854 occupied dwelling units in 1980, and 542,644 total jobs. Such a severe imbalance in the ratio of jobs to housing has meant rapidly increasing housing costs, exceedingly low vacancy rates, and the displacement of low and moderate income households who can no longer afford to live in the city... (Charles Q. Forester)

"The 2222 23rd Street project is located on a former paint manufacturing site, and represents a higher level of housing density than the immediate surrounding area. It is an infill development in a job-rich city, and thus is supportive of the regional policies quoted above." (Charles Q. Forester)

"However, the need in San Francisco for housing affordable to low and moderate income households is especially acute....According to the DEIR, the developer states that a mixed income project of 132 units, evenly divided between low, moderate and market rate units would be economically unfeasible. [ABAG] Staff notes that according to State law (AB 1151), when a developer includes at least 25% low and/or moderate income units, the jurisdiction must grant a density bonus of 25%, or provide at least two other bonus incentives. Staff strongly urges that the final EIR explore the feasibility of the City granting density bonus (e.g., 25%), in exchange for the provision of a like percentage of units available to low and/or moderate income households. The Final EIR should also explore other ways in which the City can help make inclusion of low and moderate income housing economically feasible--e.g., priority processing, waiver of some development fees, etc." (Charles Q. Forester)

"I don't know if the following suggestion is legal, but consider this. To assure affordable housing for Potrero Hill tenants, and to give them a ...chance at purchasing one of these condos, require that a top-dollar price be established which cannot be superseded at some later date; give Potrero Hill residents the first right-of-refusal to purchase these units before opening it up to others (and establish a date of determination of residency or length of time on Potrero Hill to prevent carpetbaggers); restrict purchasers of the units to owner-occupants without other property holding; and...prohibit short-term sales for profit by setting up a limited-equity condominium agreement." (James Faye)

The following comments were received by the Department of City Planning from the Department of Housing and Urban Development on 20 May 1981, after the close of the comment period on 14 May 1981; they are responded to as a courtesy to HUD.

"Alternatives to the Proposed Project-Economic Feasibility: Provision of Low and Moderate Income Housing. [EIR pp. 104-107]"

"The project sponsor has rejected this alternative as economically infeasible based on an analysis of the total project income as determined from a postulated unit mix and HUD Fair Market Rents (FMR's). (Lawrence Goldberger, HUD)

"The postulated unit mix supports the determination that this project is infeasible. However, a thorough economic analysis would examine other possible mixes, including a unit mix that would include only 10% of the units being subsidized as required by Section 1341(c) of the San Francisco Subdivision Code. (Lawrence Goldberger, HUD)

"The FMR's supporting this analysis do not consider the possibility that this office [of HUD] can, if warranted, approve up to 110% of the FMR's as stated in Table 12; or, if determined to be warranted by HUD's Central Office, approve up to 120% of the FMR's. (Lawrence Goldberger, HUD)

"The presented analysis does not consider all Federal Tax benefits accruing as income to the sponsor. (Lawrence Goldberger, HUD)

"This office [of HUD] regards the subject Draft Environmental Impact Report to be deficient in that it does not adequately describe the efforts required of the sponsor by the San Francisco Planning Commission to meet Section 1341(c) of the San Francisco Subdivision Code. Efforts to be made by the sponsor to obtain subsidies and the criteria that will be used to determine if a waiver to the code is appropriate should be adequately documented." (Lawrence Goldberger, HUD)

"These [HUD] comments indicate that Alternative C may have understated the total project income, and its economic feasibility. A more thorough analysis may find it economically feasible to include some number of subsidized rental units into this project. This would assist the City of San Francisco in meeting its goals of providing low and moderate income housing as defined by Section 1341(c) of the San Francisco Subdivision Code." (Lawrence Goldberger, HUD)

RESPONSES

The title of section D., EIR page 43, has been changed from "Socioeconomics" to "Economic and Employment Impacts" to more accurately reflect the content of the section. Discussion of economic and socioeconomic impacts is not legally required in an EIR pursuant to the California law, unlike the federal law (the National Environmental Policy Act). (The State Legislature has considered such provisions five times and rejected them because of the subjective and speculative nature of socioeconomic predictions for areas

too small to be subject to statistically valid analysis, and because of project cost increases produced by the time required to perform detailed socioeconomic analyses where these analyses are statistically valid.) Inclusion of socioeconomic information is at the discretion of individual agencies implementing CEQA. The information presented in this document has been limited to items which can be derived from existing data, with a minimum of assumptions.

There are many possible alternatives for the proposed project which would have different economic characteristics. CEQA does not require a discussion of all alternatives. The selection of alternatives should indicate the range of alternatives and the corresponding environmental consequences. One new alternative has been added to the EIR, see pp. 28 and 29 of this document.

An EIR is a neutral document which does not support or oppose any alternative. The information presented in the EIR is to be used by the Planning Commissioners and any other decision-makers in approving or disapproving a proposal. Certification of an EIR does not constitute project approval, but rather a determination that the information in the EIR is accurate and complete. By law, EIR information must be considered in the approval process.

Note that the project's 29 1-bedroom units are proposed to be sold for an average of \$82,000 (Table 13, EIR page 106); therefore, at least 14 (11% of the total units in the project) of these units would be below the \$85,000 moderate income limit. If housing costs and HUD standards were to increase at the same rate until completion of the proposed project, then 11% of the units would be moderate income units.

No housing impact fee is now being levied on downtown highrise developers. Such action has been discussed by City officials and concerned citizens; implementation requires action by the Board of Supervisors.

Some housing money is expected to be available in mid-1982 from fees paid pursuant to San Francisco's Condominium Conversion Ordinance: about \$170,000 by July 1982, and \$230,000 by May-1983 (telephone conversation, Eva Levine, Department of City Planning, 8 June 1981).

The HUD Fair Market Rents cited in TABLE 12, EIR page 104 include "utilities (except telephone), ranges and refrigerators, parking, and all maintenance, management and other essential housing services" (24 CFR Part 880, § 880.203), so that the EIR analysis of sponsor income is conservative and this income would actually be about 10% lower than stated. HUD Fair Market Rents can be exceeded by up to 10% with approval of the HUD field office manager or by up to 20% with approval of the HUD Assistant Secretary for Housing (24 CFR 880.204). The law places limitations on such exceptions, such as cost limits. The cost limits are \$23,700 for a dwelling unit without a bedroom, \$27,100 for a 1-bedroom unit, \$33,000 for a 2-bedroom unit, and \$42,000 for a 3-bedroom unit. The 1 June 1981 Federal Register lists increases in these limits effective 13 July 1981 (new range for high cost areas \$38,000 to \$55,000); it is not known what the limits would be by the time the proposed project would be built. In the past, these limits could

be increased by the Assistant Secretary for Housing, at the request of the field office, by up to 50%. Effective 13 July 1981 the Secretary is limited to an increase of \$7500. Project plans are not far enough developed to permit a determination of whether the units in the Kansas and 24th St. building would meet this criterion.

Page 105, ¶ 4 has been rewritten as follows: "Income from the sale of the 88 condominium units would be about one-half the income of the proposed project, and would cover about 60% of development costs." The numbers on EIR page 120 are March 1981 estimates, as are other dollar figures in the EIR. On page 120, "(March 1981 Dollars)" has been added under "Proposed Project Costs."

Information about the presence of public housing on the nearest RM-2 site was not included in the DEIR, in the interest of brevity. It is not clear that public housing three blocks away would have any impact on the project or that the project would have any effect on the public housing.

Market rate housing on this site, as on most sites in non-upper-income neighborhoods in the Bay Area, would cause gentrification because inflation of land, construction and financing costs has made it difficult if not impossible for low- and moderate-income families to qualify for a mortgage. Increased costs of suburban living, such as increased commute costs, also create urban gentrification pressures.

Paragraph 2, page 102, has been rewritten: "The economic impacts of this alternative would be less than those of Alternative A, or the proposed project."

A new alternative has been added to the EIR following page 106, beginning on new EIR page 106a:

"Alternative D. AB 1151 Bonus.

"AB 1151, enacted by the California Legislature in 1979, provides that any multi-unit housing project over 5 units may be granted a 25% density bonus, automatically, if 25% low or moderate cost housing units are included, regardless of local zoning laws. In this Alternative the 25% bonus is added to the proposed 132 units, for a total of 165 units. Unit mixes have been set at the same proportional mix of types as the proposed project.

"Unit numbers, prices and income are given in the table below. Project costs and income would be approximately equal so that it seems unlikely that sponsor would make any profit on this alternative. Project sponsor has rejected Alternative D for this reason. Demolition impacts of this Alternative would be the same as for the proposed alternative. Impacts that are a function of the number of units (e.g. traffic) would be about 25% greater than those of the proposed project.

"The design of this alternative could be similar to that of the high-density Alternative C, or similar to that of the proposed project but with a smaller central open space. In either case, the need for a new design would increase costs and delay the project. Delay would increase financing

TABLE 17. ALTERNATIVE D-1. PROPOSED PROJECT + 25% BONUS

A. UNIT TYPES AND PRICES

Unit Types	No. of Units		Approximate Prices	
	Moderate	Market	Moderate	Market
Studios	3	13	\$85,000 ¹	\$106,000
One-Bedroom	7	29	82,000	82,000 ²
Two-Bedroom	20	81	85,000	133,000
Three-Bedroom	3	9	85,000	192,000
Subtotals	33	132		
Total Units	165			

B. COMPARISON OF COSTS AND INCOME TO PROPOSED PROJECT

	Alternative D-1		Proposed Project	
	Moderate	Market	All Market ³	90% Market/ 10% Moderate
Studios	\$ 255,000	\$ 1,378,000	\$ 1,378,000	\$ 1,357,000 (12/1) ⁴
One-Bedroom	574,000	2,378,000	2,378,000	2,378,000 (26/3)
Two-Bedroom	1,700,000	10,773,000	10,800,000	10,400,000 (73/8)
Three-Bedroom	255,000	1,728,000	1,728,000	1,621,000 (8/1)
Subtotals	\$2,784,000	\$16,257,000	\$16,284,000	\$15,756,000
Rounded Totals	\$19,000,000		\$16,300,000	\$15,800,000
Construction Cost	19,000,000		14,700,000	14,700,000
Income/Cost Ratio	1.0 ⁵		1.10 ⁵	1.07 ⁵

¹ The limit of affordable housing cost for a moderate income household, see EIR page 105.

² Note that the average price of these units is below the present moderate limit; therefore, as now planned the proposed project includes at least 14, or 11% moderate units.

³ Note that the proposed all-market-rate development actually includes at least 14 moderate, one-bedroom units. In the 90/10 alternative in the next column 10% of each type of unit is in the moderate class.

⁴ No. of Market Units/No. of Subsidized Units.

⁵ Note that these are approximate calculations with a probable error of about 10%.

(end of main text insert)

and other inflation-related costs. These added costs could have been avoided if a decision to select this alternative had been made at the inception of the project; however, the unfavorable economics of Alternative D eliminated it from sponsor's consideration at the outset."

The City cannot afford to waive development fees as these fees pay for the staff to process permits. Insofar as scheduling limitations permit, housing projects are given priority by the Department of City Planning.

Despite its sympathy with public concern that national budget priorities should provide for basic human needs such as affordable housing, the City of San Francisco alone cannot solve national economic problems, such as inflation, which affect the cost of housing. Mayor Feinstein has stated: "Through Congress and the United States Conference of Mayors, we'll continue to crusade for useful housing programs." ("A Six-Point Program for Expanding Housing in San Francisco," 9 April 1981) And SPUR has stated: "Financing rent subsidies, and building housing that people can afford to buy are national problems that are far beyond any city's ability to resolve. The Mayor recognizes this in her policy statement." (The Mayor's Housing Program: A Cautious Approach to a Large and Complex Problem," SPUR Report No. 174, June 1981, page 5) The City is examining all potential avenues for funding of below-market-rate housing.

It would be constitutionally questionable for the City to impose a condition on approval for the project requiring sponsor to give first right of refusal to Potrero Hill residents. It would probably be necessary to make a finding that the housing deficiency in this part of the city is the greatest in the City and that crowding in existing units is the worst in the City, in order to justify such an action, and it is improbable that this could be proved. Lacking such evidence, the City would be vulnerable to legal challenge of the action.

Action to prohibit sales to persons owning other land would be subject to approval by the State Real Estate Commissioner. It is not clear what is meant by a "limited-equity condominium agreement". Short-term sales for profit could be limited if the sponsor or the condominium association required units to be owner-occupied. Such action could affect the saleability of the units. Project condominiums not occupied by owners would be rented; this would contribute to satisfying the demand for rental units.

Sources of housing funds and project sponsor's efforts to obtain low and moderate income housing subsidy funds for the proposed project are described below.

Long Term Financing Sources

1. California Housing Finance Agency. This agency sells tax-exempt bonds to finance improvement or purchase of single-family homes. Project sponsor contacted this agency at the beginning of 1981, and was told that it had no subsidy money available for construction of multi-unit projects such as the subject project (Joseph Skiffer, Foxcroft Associates, telephone conversation, 1 June 1981). CHFA is also involved in the allocation of federal funds for the Section 8 program; see point 9 below.

2. California SB 99. SB 99 is a state law which permits public entities, such as the Redevelopment Agency and the City of San Francisco, to issue tax exempt mortgage-revenue bonds to finance housing. The program was established to encourage building of market rate housing in depressed areas. The Redevelopment Agency has used this mechanism both within and outside of redevelopment areas: the Western Addition, Hunters Point, Wharf Plaza I and II, etc. Since the passage of the federal Ullman Act, effective 1 January 1981, instituting restrictions on financing mechanisms and limitation to low- and moderate-income housing, little use has been made of this financing option because of the difficulty of covering the costs of issuance of the bonds. (Philip Westergaard, San Francisco Redevelopment Agency, telephone conversation, 11 June 1981) Further actions by the State Legislature and the Internal Revenue Service (IRS) required by the Ullman Act are pending; it is unlikely that any new SB 99 bonds will be issued until the pending actions are completed. Project sponsor contacted the Redevelopment Agency at the beginning of 1980 regarding SB 99 funding and was told that SB 99 funding would not be available for subject project (Joseph Skiffer, Foxcroft Associates, telephone conversation, 1 June 1981).

3. Marks-Foran Residential Rehabilitation Act of 1973. This state law permits the issuance of tax-exempt bonds by public agencies, such as the Redevelopment Agency, the Housing Authority, and the City and County of San Francisco, to finance residential rehabilitation. Low-interest loans for housing rehabilitation in designated areas can be financed this way. The Redevelopment Agency has used this mechanism for residential rehabilitation in the Western Addition. San Francisco Rehabilitation Assistance Programs (RAP) have been financed this way since 1974. The law provides for use of this mechanism for new construction; however, neither the Redevelopment Agency nor the City has ever used the mechanism for this purpose. The federal Ullman Act imposes limitations on the issuance of tax-exempt bonds, which have affected use of the Marks-Foran law. (Darby Nelson, Redevelopment Agency, telephone conversation, 10 June 1981)

4. Mayor's Tax-exempt Mortgage Program. According to Mayor Feinstein: "We are completing plans to sell a \$60-million tax-exempt mortgage revenue bond issue by late summer or early fall [of 1981]. This program will help 1000 moderate- and middle-income families become homeowners in the first year alone." (Mayor Dianne Feinstein, "A Six-Point Program for Expanding Housing in San Francisco," 9 April 1981)

This program is planned to combine the proceeds of sales of tax-exempt bonds with private and foundation investment to create a fund to be used to provide reduced mortgage interest rates. The Office of Community Development (OCD) has been designated to coordinate all of the City's tax-exempt financing efforts for housing development. Project sponsor has spoken to William Witte, the OCD coordinator, in June 1981, and was told that no subsidy funds were available for the proposed project.

Implementation of this revenue bond program is awaiting resolution of the pending legislative and IRS actions indicated in No. 2, above.

5. HUD Home Mortgage Insurance. Under § 203 of the National Housing Act of 1934 (Public Law 73-479), HUD may provide federal mortgage insurance to

facilitate home-ownership and the construction and financing of housing. There are no provisions in this law targeting low- and moderate- income housing; any person able to meet the cash investment, the mortgage payments, and the credit requirements is eligible. (HUD, "Departmental Programs," dated 1980, issued summer 1981, p. 10; hereafter referred to as HUD Departmental Programs.) As this program is designed to encourage homeownership in general, rather than specifically low- and moderate-income housing, it is not relevant to the inclusion of below market-rate housing in the proposed project. Persons in low and moderate income categories generally cannot meet credit requirements for housing in the San Francisco price range.

6. HUD-subsidized Condominium Ownership. Federal mortgage insurance to finance ownership of individual units in multi-unit projects may be provided through § 234 of the National Housing Act of 1934 ("As added by Housing Act of 1961 (P. L. 87-70), and as amended." HUD Departmental Programs, p. 15.) This program can apply to the profit-motivated or non-profit project sponsor of an entire project or to "credit-worthy" persons buying individual units. (HUD Departmental Programs, p. 15) Persons in low- and moderate-income categories are generally not considered credit worthy for housing at San Francisco cost levels.

7. HUD Low- and Moderate-income Families Homeownership Assistance. Through § 101 of the Housing and Urban Development Act of 1968 (Public Law 90-448; also known as "Section 235," because cited law amended § 235 of the National Housing Act of 1934), HUD provides mortgage insurance and interest subsidy for low- and moderate-income home buyers. The homeowner must contribute 20 % of adjusted income to monthly mortgage payments and must make a down payment of 3 % of the cost of acquisition. The mortgage limit is \$32,000 (\$38,000 for homes for 5 or more persons), and in high cost areas such as San Francisco, \$38,000 (\$44,000 for homes for 5 or more persons). On 1 June 1981, the Federal Register listed increased limits, effective 13 July 1981 (new range \$38,000 to \$55,000); it is not known what the limits will be at the time the proposed project would be completed. The income limit for initial eligibility is 95% (95% of \$23,400 = \$22,200) of the area median income for a family of 4 and the sale price may not exceed 125 % of the mortgage limit. Under this program the maximum sales price permitted would be \$55,000. This is too low for any housing in San Francisco because land plus construction costs are greater than \$55,000, and so would not be of any assistance for the proposed project. Another, similar program, under § 221 of the Housing Act of 1954 (Public Law 83-560), applies only to 1 - 4 unit housing. (HUD Departmental Programs p. 11-12) Neither of these programs would be applicable to subject project because they are limited to a maximum of 4-unit dwellings and/or because of the cost limitations.

8. Section 222(d)(4) Low- and Moderate-income, Multi-family Rental Housing. Under this section of the National Housing Act of 1934 (added by the Housing Act of 1954), HUD provides mortgage insurance for up to 90% of the construction or substantial rehabilitation costs of rental or cooperative multi-family housing for low- and moderate-income households. "Below-market interest rates and rent supplements are no longer available for new projects for these programs." (HUD Departmental Programs, p. 21) Mortgage

insurance has relatively little effect on financing construction because of current high mortgage rates. This program and the Section 8 program described in the next section may qualify for special accelerated depreciation tax benefits.

Other Housing Subsidy Funds

9. Section 8. This program, created by the Housing and Community Development Act of 1974 (24 CFR Part 880), provides money for subsidy of rents in multi-unit buildings. The subsidy makes up the difference between what a lower income household can afford and the fair market rent for "adequate" housing units. HUD, CHFA, and the San Francisco Office of Community Development are involved in disbursement of monies in this program. Section 8 agreements should be signed before construction begins.

Section 8 money could be used in the proposed project only if the rehabilitated units in the building to be retained at Kansas and 24th Sts. were all sold to a single owner who would, in turn, be a member of the condominium owners' association. Location of all lower income families in a single building could affect the nature of their relationship with the owner families on the block.

All of San Francisco's 1980-1981 Section 8 money (for 250 units) is committed to the North of Market Neighborhood Study Area (NSA). Other funds were expected to be available; however, the Office of Environmental Review has received a letter dated 15 June 1981 from Lawrence Goldberger, Director, Housing Division, HUD, San Francisco Area Office, stating that: "Since our letter of May 18, 1981 [commenting on this EIR], there has been a Congressionally approved rescission of Section 8 funds. We anticipate no further availability of these funds for rental projects in San Francisco this fiscal year, except for those funds allocated for the North of Market NSA."

Approximately 200 additional units were expected to be available in fiscal 1982 (beginning in October 1981). (Steve Grossman, HUD, Multi-family Housing Representative, telephone conversation, 11 June 1981) The above cited letter further states: At this point we do not know the extent to which these Section 8 rental subsidies will be available in the next fiscal year, beginning October 1, 1981." (letter dated 15 June, 1981)

10. San Francisco Office of Community Development. Project sponsor has spoken with staff of this agency repeatedly during 1981, and has been told they do not expect to have any housing subsidy funds until mid-1983, after expected completion of construction of this project. (Joseph Skiffer, Foxcroft Associates, telephone conversation, 1 June 1981)

11. Community Development Block Grant Program. The block grant program established by the Housing and Community Development Act of 1974 is implemented in San Francisco by the Office of Community Development with the assistance of the Department of City Planning and other City agencies on a Technical Policy Committee. The majority of funds in this program go to redevelopment projects administered by the Redevelopment Agency, such as the Western Addition A-2 Redevelopment Project, the Hunters Point Neighbor-

hood Development Project and the India Basin Industrial Park redevelopment project. Some funds are available for site acquisition; for example, the 1978 program allocated \$500,000 for acquisition of a housing site to serve the Chinatown area (FEIR, 1978 Community Development Program and Housing Assistance Plan for the Community Development Block Grant, EE 77.250, p. 15). These funds are available only to non-profit organizations; therefore, therefore, subject project would not qualify.

12. Downtown High-Rise Housing Impact Funds. As previously indicated above (p. 27, ¶ 4), no such fee is being levied as of June 1981. No legislation to implement this concept has been introduced before the Board of Supervisors (David Cincotta, sponsor's lawyer, memorandum, 19 June 1981).

13. Condominium Conversion Fees. As previously indicated on page 27 of this document, funds from this program are not expected to be available until July 1982, after the proposed project is expected to be under construction.

The San Francisco Subdivision Code, §1341(a) provides that "In all subdivisions involving fifty (50) or more lots or units, except for condominium or cooperative conversion subdivisions, the subdivider shall make available ten percent (10%) of the units for low and moderate income occupancy provided that the City Planning Commission finds that governmental subsidies for such occupancy are available to the subdivider." The Planning Commission has not established formal criteria for determining whether governmental subsidies are available to the subdivider.

"The Mayor suggests that the present inclusionary zoning policy [in San Francisco], requiring that 10% of all housing developments of 50 or more units be allocated for low and moderate income residents, needs to be re-evaluated because the federal subsidies necessary are in danger of being abolished." ("The Mayor's Housing Program: A Cautious Approach to a Large and Complex Problem," SPUR Report No. 174, June 1981, page 1.)

8. Victoria Mews

COMMENTS

"Going to page 45, and the last paragraph of page 44, I recommend that you eliminate that whole section. I think it is terribly misleading." (Commissioner Rosenblatt)

At the bottom of 44 it indicates that, "The data suggests that housing prices on Potrero Hill are rising at a faster rate than in San Francisco as a whole. There is no evidence in this document about what rates are in San Francisco. More importantly -- well, then it goes on to say, Victoria Mews, relative to the rest of Potrero Hill...if you look at the last column, the [data] do not justify that, and...it is indicated in here, also on [pp] 43 and 44, but most importantly, to use one, two, three, four, five, six examples, and talk about housing price trends in this area...is ludicrous and misleading." (Commissioner Rosenblatt)

"I understand that you can't gather that kind of data, but you should not

put in misleading data as if it were saying something. That ought to go out altogether." (Commissioner Rosenblatt)

"The brief section on the socio-economic impact of the project suggested some interesting findings regarding the Victoria Mews influence on housing costs in the vicinity. However, the methodology was weak and prompted Commissioner Rosenblatt to ask for its' removal from the report. I would like to see a thorough analysis of the effects on Potrero Hill housing costs since the development of Victoria Mews. Such research would show what might happen if the proposed 2222 23rd Street project...becomes a reality. It would be a prudent action by the Department and well worth the time, no matter what its' findings. For that matter, a thorough examination of condominium ownership in San Francisco would be a wise move. I trust plans for such analysis are underway." (James Faye)

RESPONSES

The last ¶ of Page 44 and Table 6 on page 45, which discuss Victoria Mews, have been deleted.

The Department of City Planning has had an ongoing concern about condominium conversion in San Francisco. In 1974-5, the Department participated in expanding the San Francisco Subdivision Code to cover condominium conversions. In 1978-9, the Department drafted further amendments to this Code dealing with condominium conversions, which became effective 6 July 1979. In 1980, additional amendments were drafted and endorsed by the Planning Commission; they are now (18 June 1981) pending before the Board of Supervisors.

A number of other ordinances affecting condominium conversion are pending before the Board of Supervisors. Information about these ordinances can be obtained from the Clerk of the Board of Supervisors.

A limit of 1000 converted units per year was set by the 1979 amendments. (Ordinance 337-79, § 1396) The allotment for 1981 has been exhausted and the waiting list for additional permits has already exhausted the 1982 allotment. Because of this, new applications for condominium conversions are not being accepted by the Department of Public Works.

The following information materials on condominium conversion are available from the Department of City Planning: "Condominium Subdivision Actions of the San Francisco Department of City Planning Subsequent to Adoption of the Subdivision Code in May 1975, Prior to Adoption of Condominium Amendments in July 1979" (27 July 1979); "Condominium Subdivision Applications Received by Department of City Planning, July 1, 1979 - March 31, 1980" (10 April 1980); "Memorandum to Persons with an Interest in Condominium Conversions from Rai Y. Okamoto, Director of Planning Re: Proposed Amendments to the San Francisco Subdivision Code" (4 August 1980); "Analysis of Condominium Conversion Subdivisions Received in 1980" (20 March 1981) and "Summary of the Subdivision Process as related to Department of City Planning" (15 May 1981). (Alec Bash, Department of City Planning, telephone conversation, 9 June 1981)

9. Mitigation Cost

COMMENT

"Mitigation Measures - the EIR outlines mitigation measures with no analysis of cost addressed or firm commitment to implementation. How much will the price of the units increase if all mitigation measures are instituted? We believe that all mitigation measures should be implemented in order to insure the health and safety of neighbors and future residents. We believe the mitigation measures should be instituted regardless of who the eventual developer might be." (Jim Firth)

RESPONSES

All the health and safety mitigation measures listed on EIR pages 88 - 92 would be implemented except for the bagging of dusty, non-asbestos materials. Paul Schwabacher of the San Francisco Health Department has indicated that there is not enough dust on the site to require such a measure (during site visit on 28 May 1981).

The cost of mitigation measures involving changes in the buildings cannot be estimated now because building design is not far enough along to permit such estimates. The City Planning Commission could require measures not agreed to as conditions of the conditional use permit, if it thought the measures were feasible and necessary.

10. Notification

COMMENT

"I would like there to be more adequate notification of my neighbors." (Christopher Sabre)

RESPONSE

"In regard to notice to the neighbors, I would like to note for the record that 30 days before this hearing we did post a sign at ten locations on and near the site indicating the availability of the Environmental Impact Report, and that this hearing would be held.

"The time for receipt of comments runs until May 14. There will be additional time for those who may not have known about it until the last few days, to make their comments, more thorough comments, known to the staff." (Robert Passmore, Zoning Administrator, at public hearing on DEIR)

The Public hearing was advertised in the San Francisco Progress on 27 March 1981.

11. Staff Initiated Text Changes

On page 1, ¶ 1, line 2, "-oriented" has been added after "neighborhood."

Page 4, ¶ 2, lines 4 and 5. "east" has been corrected to "west" and "west" has been corrected to "east." In ¶ 3, line 2, "-oriented" has been added after "neighborhood."

Page 18, ¶ 1, sentence 3, has been expanded to read: "With the exception of a grocery store, beneath 6 residential units, on the northeast corner of Kansas and 23rd Sts., a possible industrial use in a duplex on Kansas St. in the block north of the site (posted with warnings and requirements for special clothing), and the Freeway..."

Page 40: Information has been added to TABLE 4. ALLOWABLE HOUSING DENSITY BY ZONING DISTRICT. The revised table is on page 37 of this document.

The following sentence has been added at the end of ¶ 1, page 73: "This analysis does not include the possible use of natural gas for heating swimming pool water."

On page 77, a sentence has been added at the end of ¶ 2: "The swimming pool would use approximately 1500 - 2000 gpd, or an additional 10 - 13% of the other project water use." (calculation based on Metcalf & Eddy, "Wastewater Engineering," 2nd Ed., 1979, p. 17) At the end of the first sentence on EIR page 78, this text has been added: "Adding 2000 gpd for the swimming pool, the total water use of the project would be a maximum of 15,700 gpd." The percentage on line 3 has been changed to "0.07%."

On page 86, the following sentence has been added to the end of ¶ 4: "Project sponsor would consult the Planning Department before selecting street trees."

TABLE 4. ALLOWABLE HOUSING DENSITY BY ZONING DISTRICT

District	Required sq. ft. per unit ¹	Maximum number of units
RH-2, Residential, House District, Two-Family (present zoning)	1500 ²	53
RH-2, P.U.D. ³	up to 1000 minus 1 unit	79
RH-3, Residential, House District, Three-Family	1000 ¹	80
RM-1, Residential Mixed District, Low Density	800	100
RC-1, Residential-Commercial Combined District, Low Density	800	100
RC-2, Residential-Commercial Combined District, Moderate Density	600	133
RM-2, Residential Mixed District, Moderate Density (proposed zoning)	600	133
RM-2, P.U.D. ³	up to 400 minus 1 unit	199
RC-3, Residential-Commercial Combined District, Medium Density	400	200
RM-3, Residential Mixed District, High Density	400	200
RM-3, P.U.D. ³	up to 200 minus 1 unit	399

¹ There are 80,000 square feet in the proposed site.

² Development at this density requires conditional use permit.

³ P.U.D. = Planned Unit Development, requiring conditional use permit.

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SAN FRANCISCO

CITY PLANNING COMMISSION

RESOLUTION NO. 9029

WHEREAS, A draft environmental impact report, dated March 27, 1981, has been prepared by the Department of City Planning in connection with EES0.110: 2222 - 23rd Street, 132-unit condominium development with 8,500 sq. ft. of commercial space and 161 parking spaces, requiring zoning reclassification from RH-2 to RM-2 on the property described as follows:

Lot 1 in Assessor's Block 4216; the entire block bounded by Kansas, 23rd, Rhode Island and 24th Streets; and

WHEREAS, The Department duly filed a notice of completion of the draft report with the Secretary of the California Resources Agency, gave other notice and requested comments as required by law, made the report available to the general public and satisfied other procedural requirements; and

WHEREAS, The City Planning Commission held a duly advertised public hearing on said draft environmental impact report on April 30, 1981, at which opportunity was given for public participation and comments; and

WHEREAS, A final environmental impact report, dated July 2, 1981, has been prepared by the Department, based upon the draft environmental impact report, any consultations and comments received during the review process, any additional information that became available, and a response to any comments that raised significant points concerning effects on the environment, all as required by law; and

WHEREAS, On July 2, 1981, the commission reviewed the final environmental impact report, and found that the contents of said report and the procedures through which it was prepared, publicized and reviewed comply with the provisions of the California Environmental Quality Act, the Guidelines of the Secretary for Resources and San Francisco requirements;

THEREFORE BE IT RESOLVED, That the City Planning Commission does hereby find that the Final Environmental Impact Report, dated July 2, 1981, concerning EES0.110: 2222 - 23rd Street is adequate, accurate and objective, and does hereby CERTIFY THE COMPLETION of said Report in compliance with the California Environmental Quality Act and the State Guidelines;

AND BE IT FURTHER RESOLVED, That the Commission in certifying the completion of said Report does hereby find that the project as proposed will not have a significant effect on the environment.

I hereby certify that the foregoing Resolution was ADOPTED by the City Planning Commission at its regular meeting of July 2, 1981.

Lee Woods, Jr.
Secretary

AYES: Commissioners Bierman, Kelleher, Klein, Nakashima, Portman

NOES: None

ABSENT: Commissioners Rosenblatt, Salazar

PASSED: July 2, 1981

APPENDICES

A. Proposed Project Costs

B. Traffic

C. Chemical Data

1. Chemicals Found on Project Site
2. Metal Compounds Used in Paint Pigments
3. Soil Concentrations of Elements Found On Site
4. Location of Core Samples
5. Site Distribution of Arsenic
6. Site Distribution of Cadmium
7. Site Distribution of Chromium
8. Site Distribution of Copper
9. Site Distribution of Lead
10. Site Distribution of Mercury
11. Site Distribution of Zinc

There is no page 158.

APPENDIX A

Projected Project Costs

APPENDIX A

Proposed Project Costs (March 1981 Dollars)

Basic Construction	\$11,239,000*
Land Cost	1,440,000
Land Carrying Cost	653,000
Demolition	346,000*
Site Preparation	202,000*
Architecture	374,000
Engineering	161,000
Legal	40,000
Soils	23,000
Marketing	
Sales/Models	230,000
Financing	
Construction Loan 2 pts.	323,000
End Loans 1 pt.	242,000
Interest During Construction	1,498,000
Homeowners Due (by Developer)	<u>127,000</u>
Total Development Cost	<u><u>\$11,898,000</u></u>

* Construction costs

APPENDIX B

Traffic

LEVELS OF SERVICE DEFINITIONS
FOR SIGNALIZED INTERSECTIONS*

Level of Service A

Level of Service A describes a condition where the approach to an intersection appears quite open and turning movements are made easily. Little or no delay is experienced. No vehicles wait longer than one red traffic signal indication. The traffic operation can generally be described as excellent.

Level of Service B

Level of Service B describes a condition where the approach to an intersection is occasionally fully utilized and some delays may be encountered. Many drivers begin to feel somewhat restricted within groups of vehicles. The traffic operation can generally be described as very good.

Level of Service C

Level of Service C describes a condition where the approach to an intersection is often fully utilized and back-ups may occur behind turning vehicles. Most drivers feel somewhat restricted, but not objectionably so. The driver occasionally may have to wait more than one red traffic signal indication. The traffic operation can generally be described as good.

Level of Service D

Level of Service D describes a condition of increasing restriction causing substantial delays and queues of vehicles on approaches to the intersection during short times within the peak period. However, there are enough signal cycles with lower demand such that queues are periodically cleared, thus preventing excessive back-ups. The traffic operation can generally be described as fair.

Level of Service E

Capacity occurs of Level of Service E. It represents the most vehicles that any particular intersection can accommodate. At capacity there may be long queues of vehicles waiting up-stream of the intersection and vehicles may be delayed up to several signal cycles. The traffic operation can generally be described as poor.

Level of Service F

Level of Service F represents a jammed condition. Back-ups from locations downstream or on the cross street may restrict or prevent movement of vehicles out of the approach under consideration. Hence, volumes of vehicles passing through the intersection vary from signal cycle to signal cycle. Because of the jammed condition, this volume would be less than capacity.

* City and County of San Francisco, Department of Public Works,
Traffic Engineering Division

VEHICLE VOLUME

Graphic Summary Sheet

LOCATION 23rd St. & Kansas St.

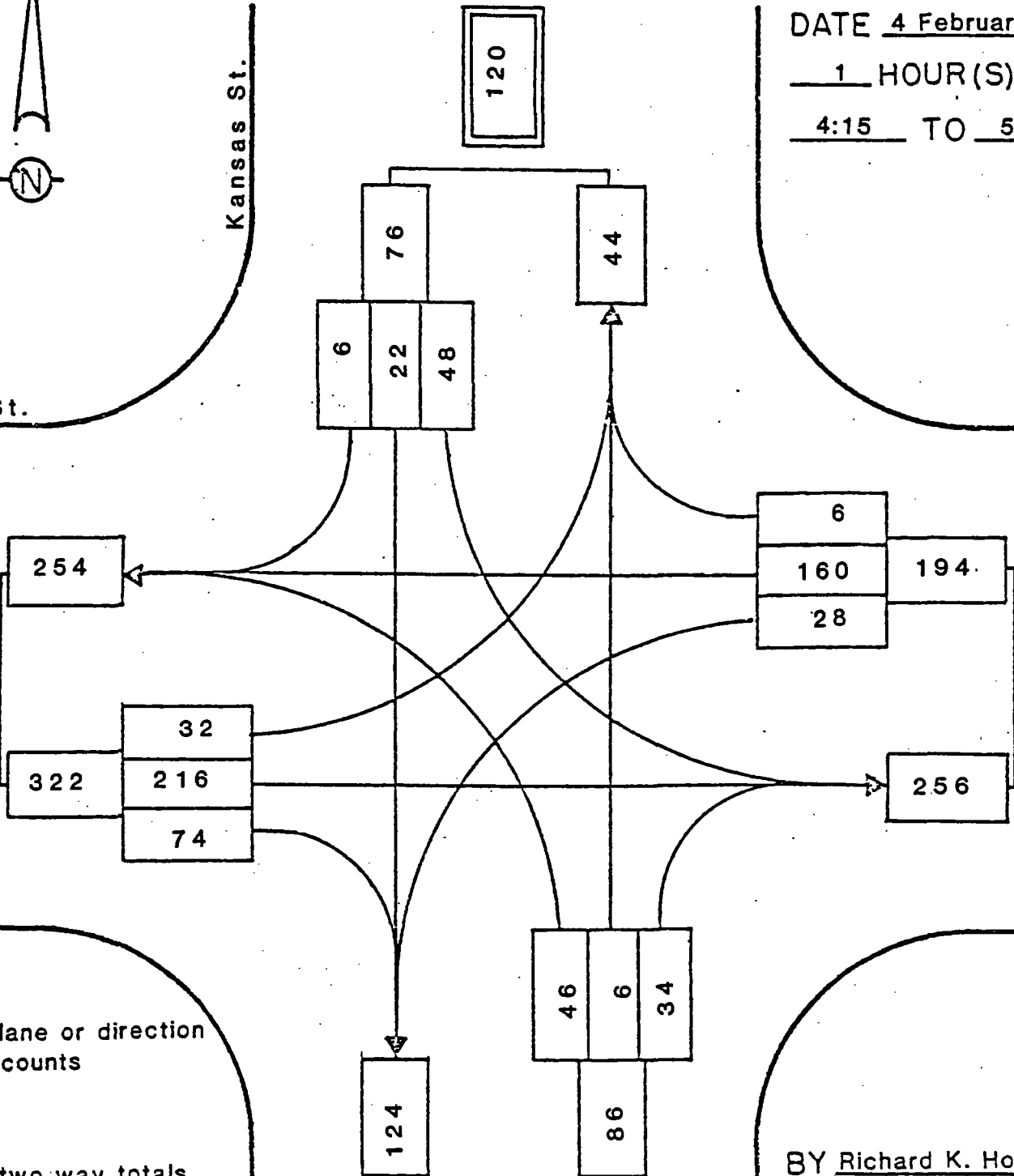
DATE 4 February 1981

1 HOUR(S) FROM
4:15 TO 5:15 ~~AM~~ PM



23rd St.

Kansas St.



-lane or direction
counts

-two way totals

BY Richard K. Hopper, P.E.

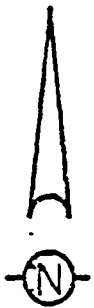
VEHICLE VOLUME

Graphic Summary Sheet

LOCATION 24th St. & Rhode Island St.

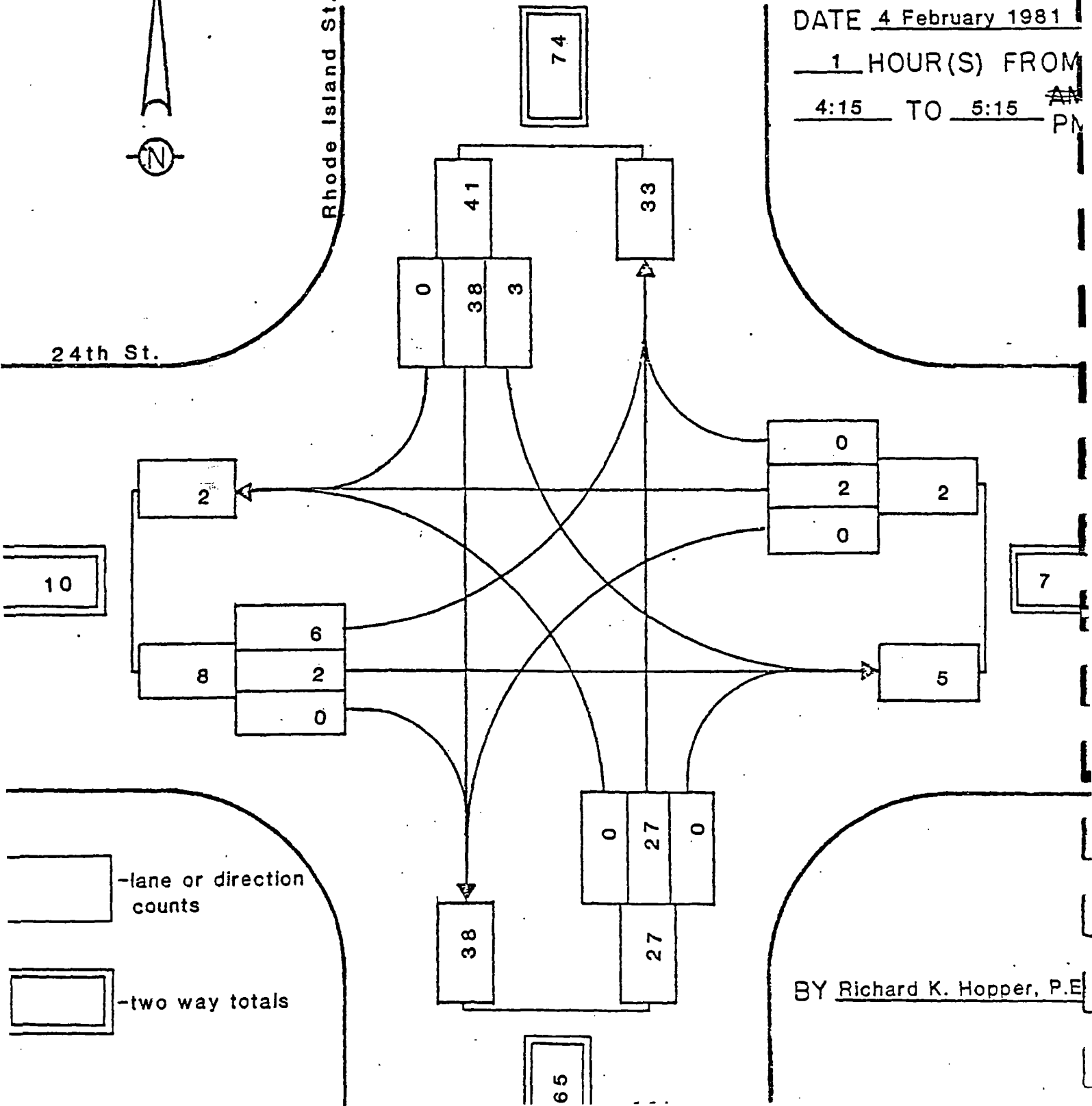
DATE 4 February 1981

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4:15 TO 5:15 ~~AM~~ PM



Rhode Island St.

24th St.

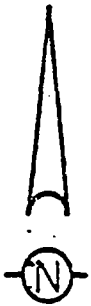


BY Richard K. Hopper, P.E.

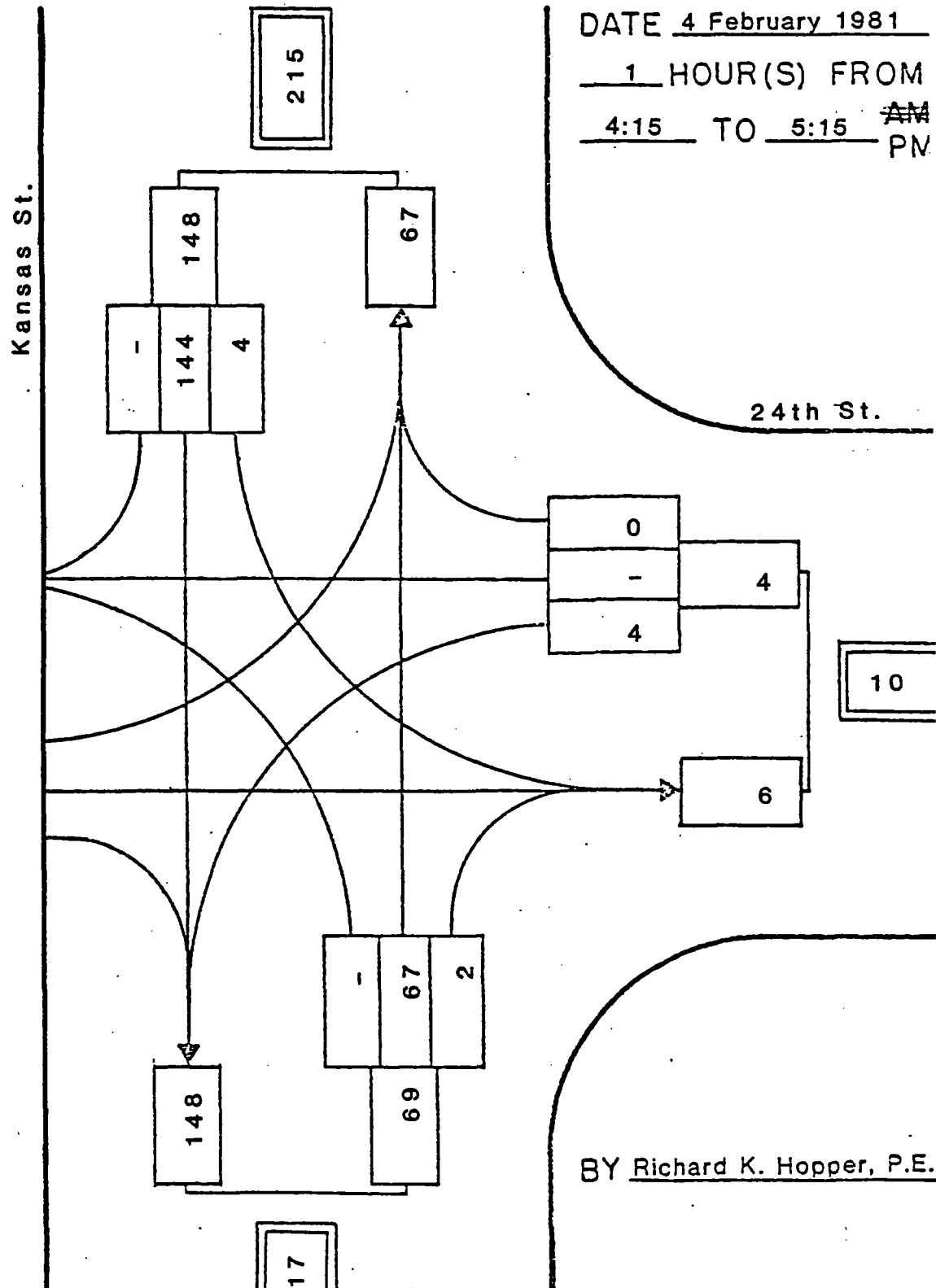
VEHICLE VOLUME

Graphic Summary Sheet

LOCATION 24th St. & Kansas St.



DATE 4 February 1981
1 HOUR(S) FROM
4:15 TO 5:15 ~~AM~~ PM



-lane or direction counts

-two way totals

BY Richard K. Hopper, P.E.

VEHICLE VOLUME

Graphic Summary Sheet

LOCATION 23rd St. & Rhode Island St.

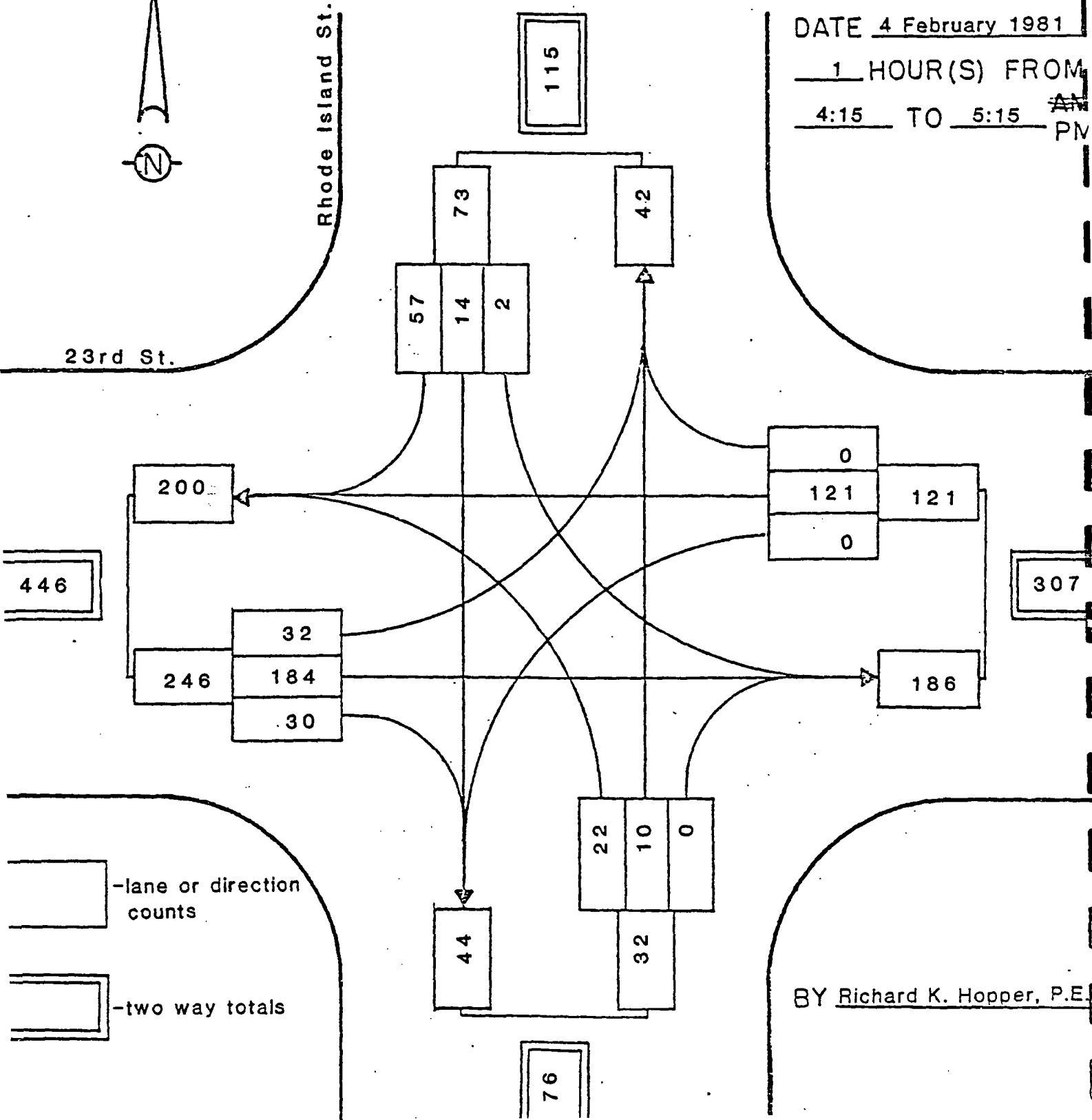
DATE 4 February 1981

1 HOUR(S) FROM
4:15 TO 5:15 ~~AM~~ PM



Rhode Island St.

23rd St.



BY Richard K. Hopper, P.E.

APPENDIX C

1. Chemicals Found On Site
2. Metal Compounds Used in Paint Pigments
3. Soil Concentrations of Elements Found On Site
4. Location of Core Samples
5. Site Distribution of Arsenic
6. Site Distribution of Cadmium
7. Site Distribution of Chromium
8. Site Distribution of Copper
9. Site Distribution of Lead
10. Site Distribution of Mercury
11. Site Distribution of Zinc

C.1: CHEMICALS FOUND ON PROJECT SITE.

Item	Bldg.	Level	Description	Manufacturer	Label	Opened?	Comments
1	1	Grnd.	1-5 gal drum Sol 150, "for pool chlorination, "corrosive"	Jones Chem. "Corp., Cale- donia, NY	orig.	empty	
2			1-5 gal metal drum "Dromus," coolant, cutting oil		orig.	yes	
3		2	home size bathroom cleaning products		orig.	most	
4		3	2-5 gal plastic cans "Hard Water Rinse Fluid"	Natl. Insti- tutional Food Distri- butors Asso- ciates Inc., Atlanta, GA	orig.	yes	East side of fire escape.
5			1-5 gal plastic drum dark liquid, labelled "poison cleaner"		hand	yes	
6			1-3/4 gal "Lime-A- Way, contains: phosphoric acid "hydroacetic acid"		orig.	yes	Found moved and spilled 18 June. Corrosive. Contact with common metals produces hydrogen which may form flammable mixtures with air. Moderately irritating to eyes, skin, mucous membranes. Safe human expo- sure limit 0.1 parts per million (ppm) in air. Vapor forms explosive mixtures with air. Dangerous in contact with oxidizing materials. Flash Point 109°F.
7			2-5 gal containers soft brown solid	none	yes		Looks like cooking fat or wax.

CHEMICALS FOUND ON PROJECT SITE, Page 2.

Item	Bldg.	Level	Description	Manufacturer	Label	Opened?	Comments
8	1	3	1-50 gal cardboard drum Formula 251, boiler cleaner, contains sodium polyacrylate	Garrat-Callahan, Milbrae, CA	orig.	maybe	DOT required label: non-corrosive, non-toxic cleaning compound. pH approx. 8 (slightly basic).
9			1 home-size can Black Flag pesticide		orig.	yes	Some Black Flag products contain DDVP and isopropoxyphenyl methyl carbamate. DDVP produces human blood and skin effects at 1 part per trillion in air and is teratogenic. The carbamate has a safe human exposure limit of 0.5 ppt in air. Can gone as of 20 June 1980.
10		4	1-½ gal can paint remover, contains methylene chloride (dichloromethane)	Montgomery Ward	orig.	yes	Narcotic in high concentrations. Suspected human carcinogen. Human safe exposure limit 1000 ppm.
11		5	bathroom cleaning products		orig.	yes	
12		6	1-5 gal drum paint		none	yes	Near elevator; not in orig. container.
13	2	grnd.	1-1 gal can automotive lacquer		orig.	yes	Near Kansas St. entrance.
14			1-wooden box cleaning products		orig.	most	
15			1-50 gal, blue metal drum		hand	maybe	Labelled 3OH with 3 and possibly 0 crossed out and 4 written in.
16			50 to 100 lqt to 1 gal spray & non-spray paint cans		orig.	about ½	

CHEMICALS FOUND ON PROJECT SITE, Page 3

Item	Bldg.	Level	Description	Manufacturer	Label	Opened?	Comments
17	2	grnd.	2-1 qt to 1 gal paint thinner		orig.	yes	
18			1-55 gal blue plastic not on label drum "Typewash #54A, S.E.X. typewash, "caution combustible"		yes	yes	
19			Approx 100 gal vat with bottom spigot. Paint?		unlabelled yes		Part full.
20			3-55 gal drums, "gasoline," "danger flammable"		hand	yes	Part full.
21			1-55 gal drum		unlabelled yes		
22	2		Assorted pt to gal cleaning products, including ammonia.		orig.	some	Irritant at 20 ppm in air.
23			1-5 gal drum floor wax		orig	?	
24			1-1 gal photographic fixer, contains: sodium thiosulfate, acetic acid		orig.	?	See Item 6.
25			Approx 10-1 qt paint cans		none	yes	
26	3		personal toiletries		orig	mostly	

CHEMICALS FOUND ON PROJECT SITE, Page 4

Item	Bldg	Level	Description	Manufacturer	Label	Opened?	Comments
27	2	4	household size paint & cleaning supplies		orig + mostly hand		
28	3	grnd (not base- ment here)	2-1 gal jugs Lucdol, 60% methyl ethyl ke- tone peroxide (2- butanone peroxide) dimethyl phthalate	Kodak	orig	?	Affects human intestinal tract. Flash Point 21 ⁰ F. Fire fighting should be done from an explosion resistant location. Carcinogenic in mouse. Teratogen in rat. Irritating to mucous membranes. Nervous system depressant. Human permissible ex- posure limit 5 ppm. Incompatible with nitrates.
29			8-1 gal "rapid fixer"		orig	some	
30			1-1 gal "Pakosol" print conditioner	Pako Corp., Minneapolis, Minn.	orig	?	
31			2-1 gal containers varnish remover, methylene chloride	Montgomery Ward.	orig	?	See Item 10.
32		3	1-1 gal linseed oil		orig	yes	
33		4	1-1 gal "all purpose cleaner"		orig	yes	
34	3,4,5	loading dock	10-50 gal metal drums full of liquid		none	yes	Non-flammable, acidic, similar con- tents.
35	4	grnd	1-blue plastic, 50 gal drum		none	no	Near entrance to bldg. 3.

CHEMICALS FOUND ON PROJECT SITE, Page 5

Item	Bldg.	Level	Description	Manufacturer	Label	Opened?	Comments
36	5	N/A	2-55 gal drums "Swifts Adhesive"		orig	yes	
37			1-5 gal plastic drum "Flexichrome green"		orig	yes	
38			7-55 gal drums "urea resin"	Reichhold Chem	hand	maybe	
39			1-55 gal drum "sand"		hand	maybe	
40			6-55 gal drums iso-butanol		hand	maybe	Flash Point 82°F. Firefighting should be done from an explosion-resistant location. Carcinogenic in rat. Mildly irritating to skin and mucous membranes. Narcotic in high doses.
41			2-55 gal drums "White glue"		hand	yes	
42			9-5 gal cans cement sealer, "Steel coat"		orig	maybe	
43			8-5 gal cans Tremco-300, "sealer for concrete floors," contains: urethane, polyester resin, epoxy resin, alkyd resin		orig + hand	maybe	Carcinogenic in rat, mouse, guinea pig and hamster. Teratogenic in rat, mouse and hamster.
44			approx 10-1 gal cans latex stain		orig	no	

Item	Bldg.	Level	Description	Manufacturer	Label	Opened?	Comments
45	5	N/A	approx 50-1 qt cans paint		orig	no	
46			1-55 gal drum "pine glaze," contains petroleum distillates and/or industrial solvents	Lily Industrial Coatings, 901 W Union St, Montebello, CA	orig + hand	yes	
47			2-3 gal containers "Plastiglaze type c, aluminum grade"		orig	yes	
48			2-55 gal drums "Polalyte Resin solution, contains: styrene,	Reichold, LA	orig	maybe	Flash Point 90°F. Forms explosive mixtures with air. Vapor may travel considerable distance to source of ignition then flash back. Fire-fighting should be done from an explosion resistant position. Eye and respiratory irritant. Keep away from oxidizing agents.
			and/or "acrylite monomers"				
49			1-55 gal drum "carpet adhesive"		hand	yes	Found spilled on 20 June; is adhesive.
50			11-55 gal cardboard drums, 1 labelled Dylite expandable polyester; open drums contain powder		orig	yes	

CHEMICALS FOUND ON PROJECT SITE, Page 7

Item	Bldg.	Level	Description	Manufacturer	Label	Opened?	Comments
51	5	N/A	1-55 gal drum "lube oil"		stencil	yes	Not full.
52			1-55 gal drum "Aluminum sealer"	Parwaf Mfg. LA	orig + hand	yes	
53			1-5 gal drum "darkroom"		hand	yes	
54			8-55 gal drums stucco patch		stencil	maybe	
55			1-55 gal cardboard drum spackling powder		orig?	yes	South side of bldg. May contain asbestos. Found spilled 20 June.
56			18-1 gal cans Dursban 2E insecticide (lorsban, Chlorpyrifos)	Dow	orig	no	Soil insecticide for control of wire worms, cutworms, corn root-worms. Occupational exposure limit 0.2 ppm in air. Cans nearly rusted through.
57			15-55 gal, old, metal drums	Orig label Harvest Base Co.		yes	No indication of nature of contents. Some with red spray paint crosses.
58	6	grnd	2-55 gal plastic drums clay slip		hand	maybe	One found spilled 20 June.
59			approx 20 bags fertilizer, ammonium nitrate		orig	some	Explosive. Organic matter can sensitize to more readily explodable state. Melts at 337° F. Emits toxic gases on decomposition. Responsible for 1947 Texas City disaster.
60	8	grnd	2-55 gal drums "diatomaceous earth"		hand	yes	Made up of fused silica, spherical submicroscopic particles under 0.1u.

Item	Bldg.	Level	Description	Manufacturer	Label	Opened?	Comments
61	10&11	grnd	1-1 gal bottle hydro-chloric acid		orig	yes	Found moved on 20 June 1980. Fatal at 1500 ppm in air. High reactivity. Contact with common metals produces hydrogen which may form explosive mixtures with air. Keep away from oxidizable materials.
62			1-1 gal container soda ash (sodium carbonate)		orig	yes	Eye and skin irritant.

C.2: Toxicity of typical inorganic paint pigments.

Common Name	Chemical Name	Chemical Formula	Color	Human Target Organs	Occupational Permissible Exposure Limits in milligrams/cubic meter air ¹	Comments
Litharge	lead oxide	PbO	yellow	blood, nervous system, kidney	0.002	
Orpiment	arsenic trisulfide	As ₂ S ₃	yellow	intestinal tract, skin, nervous system	0.002	Now little used; carcinogen ²
Paris Green	copper acetate meta-arsenate or copper, bis (acetato) hexa-meta-arsenito-tetra-	Cu(C ₂ H ₃ O ₂) ₂ · 3Cu(AsO ₂)	green	intestinal tract, nervous system	0.002	
Realgar	arsenic disulfide	As ₂ S ₂	brownish-red	intestinal tract, skin, nervous system	0.002	Now little used; carcinogen
Cadmium Yellow	cadmium sulfide	CdS	yellow	kidney, lungs	0.04	carcinogen
Cadmium Red	cadmium sulfide/cadmium selenide mixtures	CdS CdSe	light red to maroon	kidney, lungs, liver, prostate, blood	0.04	carcinogen
Chrome Yellow	lead chromate	PbCrO ₄	yellow	blood, nervous system, kidney	0.05	carcinogen
Red Lead	lead oxide	Pb ₃ O ₄	red	kidney, blood, nervous system	0.05	used to protect steel

C.3: Comparison of normal soil concentrations of some elements and minimum and maximum concentrations found on site.

Element	Normal Soil Range ppm	Site Values					
		Minimum ppm bore # depth			Maximum ppm bore # depth		
Cadmium	0.1 - 7 ¹	<0.6	4	3 feet	17	S	0 feet
Chromium	trace - 250 ⁵	34	3	4.3	1000	8	9.4
Copper	2 - 150 ¹	7.9	4	3	160	S	0
Lead	1 - 200 ^{3,4}	5.6	1	15.3	4800	S	0
Mercury	0.1 ²	0.12	8	9.4	8.6	S	0
Zinc	trace - 250 ⁵	19	8	9.4	4200	S	0
Arsenic	1 - 70 ⁶	3.5	3	4.3	60	4	15

1 "The Nature and Properties of Soils," 8th Ed. Nyle, C. Brady, MacMillan 1974.

2 Average concentration. "Mercury in Your Environment," Bendix, Selina, Oceanic Society, 1971, p.1.

3 Zimdahl, Robert L. & Skogerboe, Rodney K. "Behavior of Lead in Soil," Environmental Science and Technology, 11:1202-1207(1977).

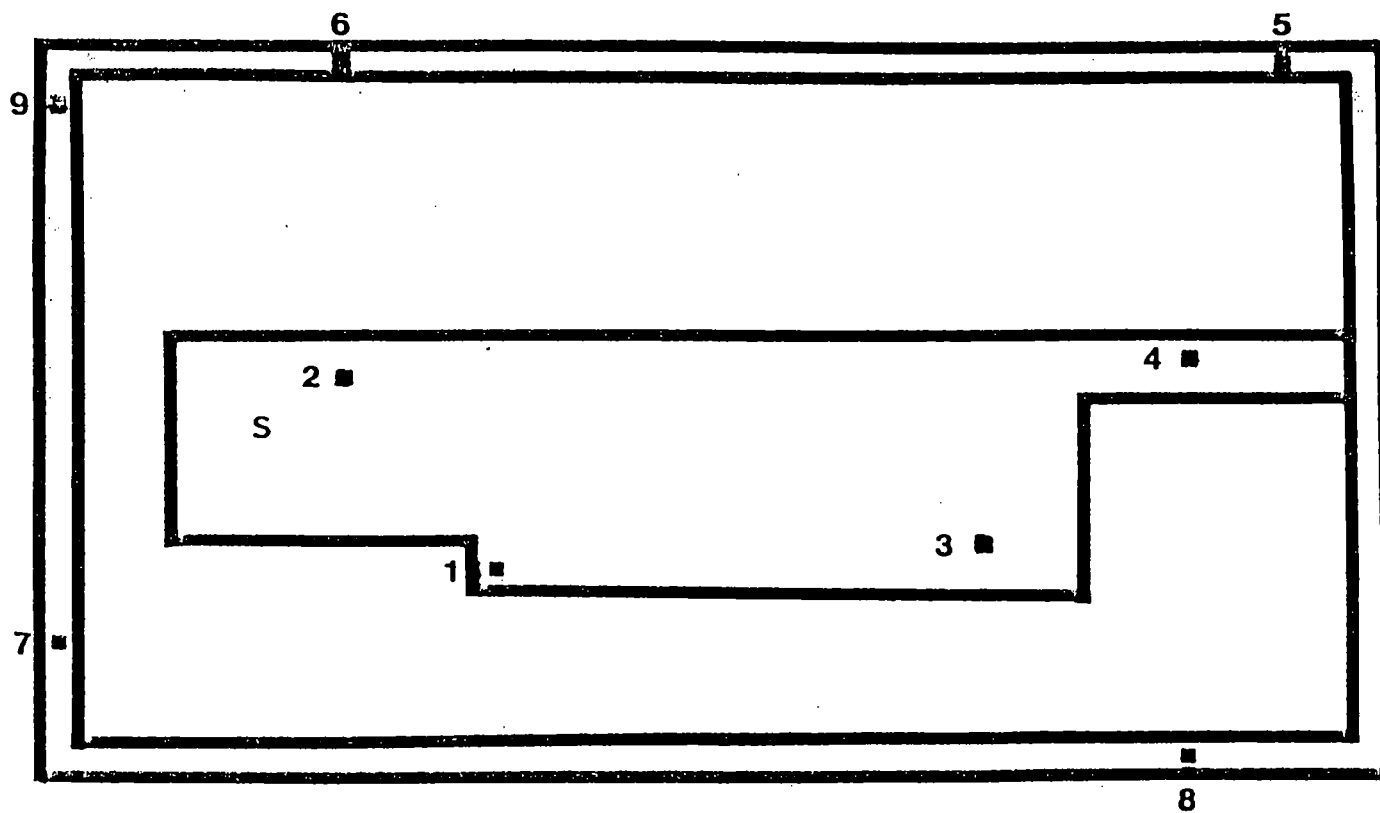
4. Soil used to replace lead-contaminated soil in an Oakland park was found to have 15-19 ppm lead* (*Wesolowski, Jerome, J., "The Identification and Elimination of a Potential Lead Hazard in an Urban Park," Archives of Environmental Health, 34:413-418(1979)).

5 Baetjer, Anna M., "Chromium," Proc. Symp. Toxicity of Metals, Industrial Health Fdn, 1975.

6 Bear, Firman E., "Chemistry of Soil," p. 366, 2nd Ed., 1964.

S = surface sample.

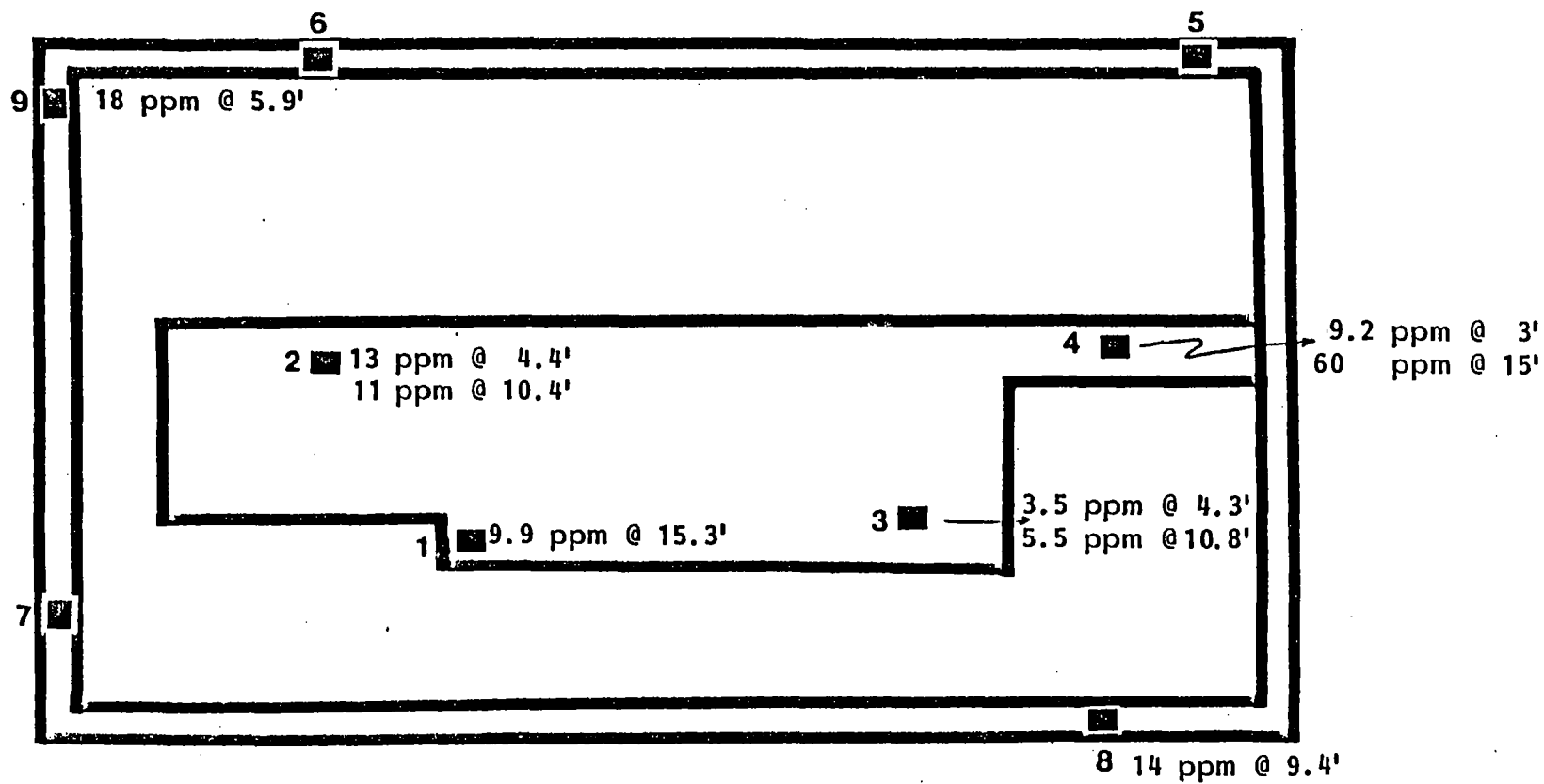
C.4: Location of Core Samples.



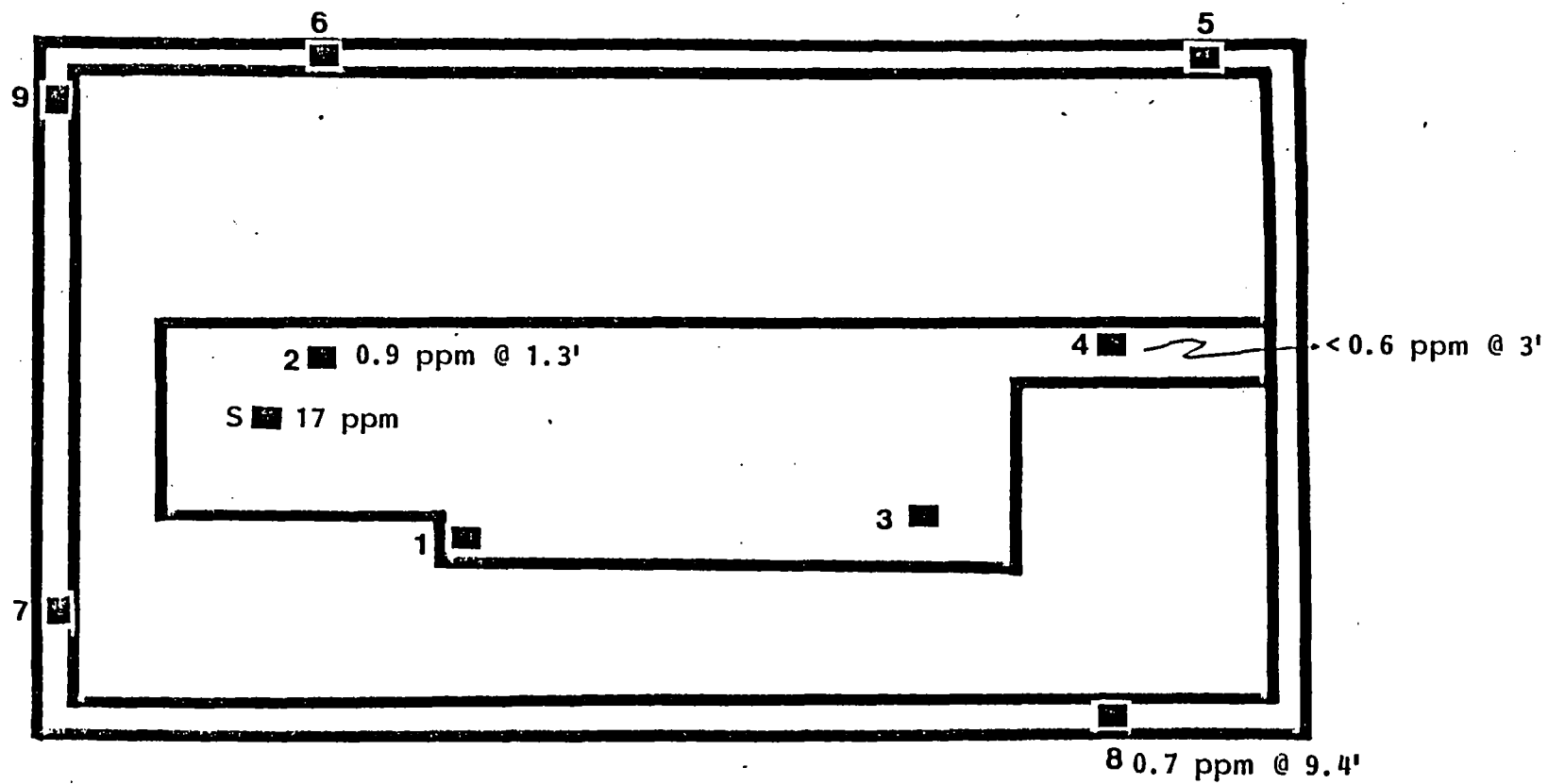
S: Location of Surface Sample



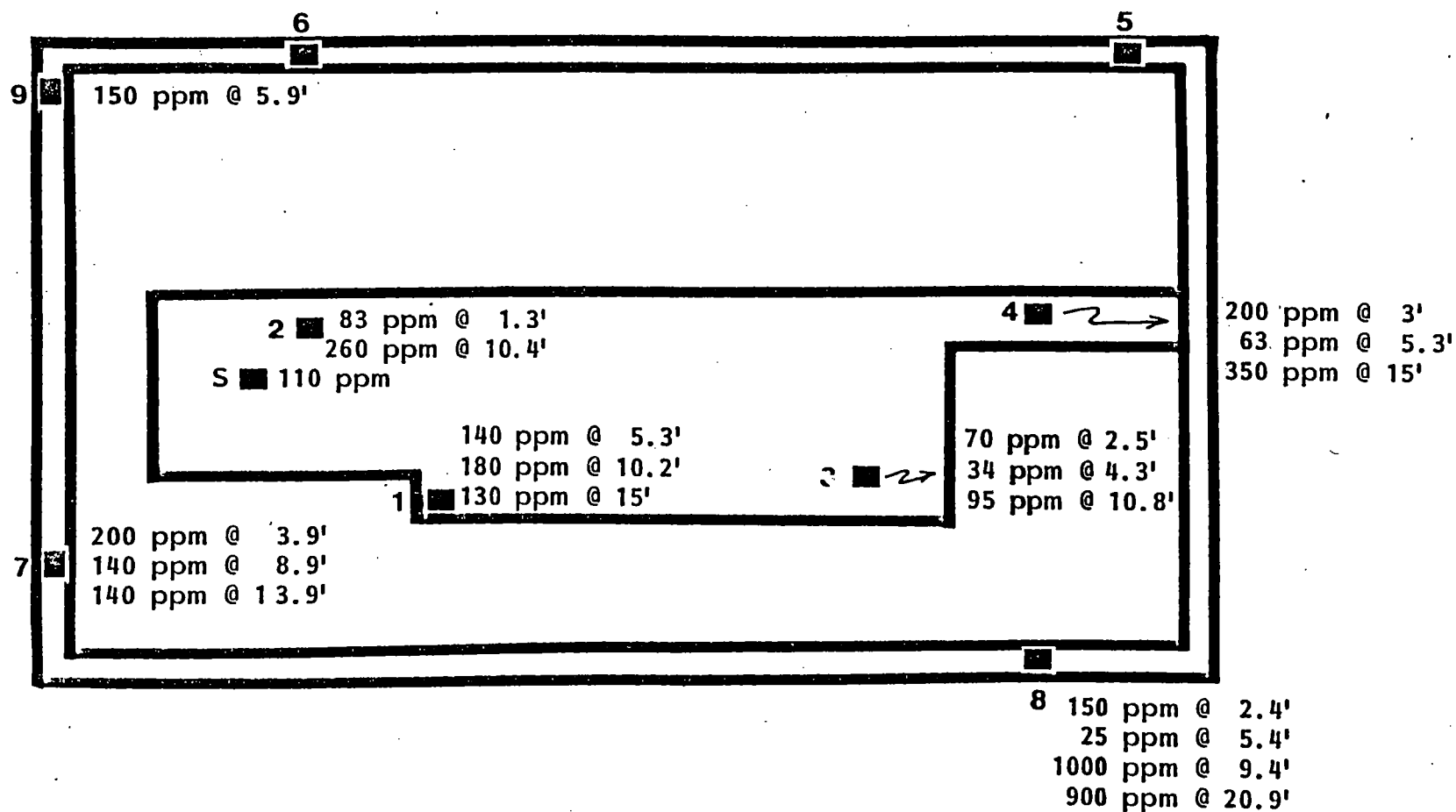
C.5: Distribution of ARSENIC on the site.



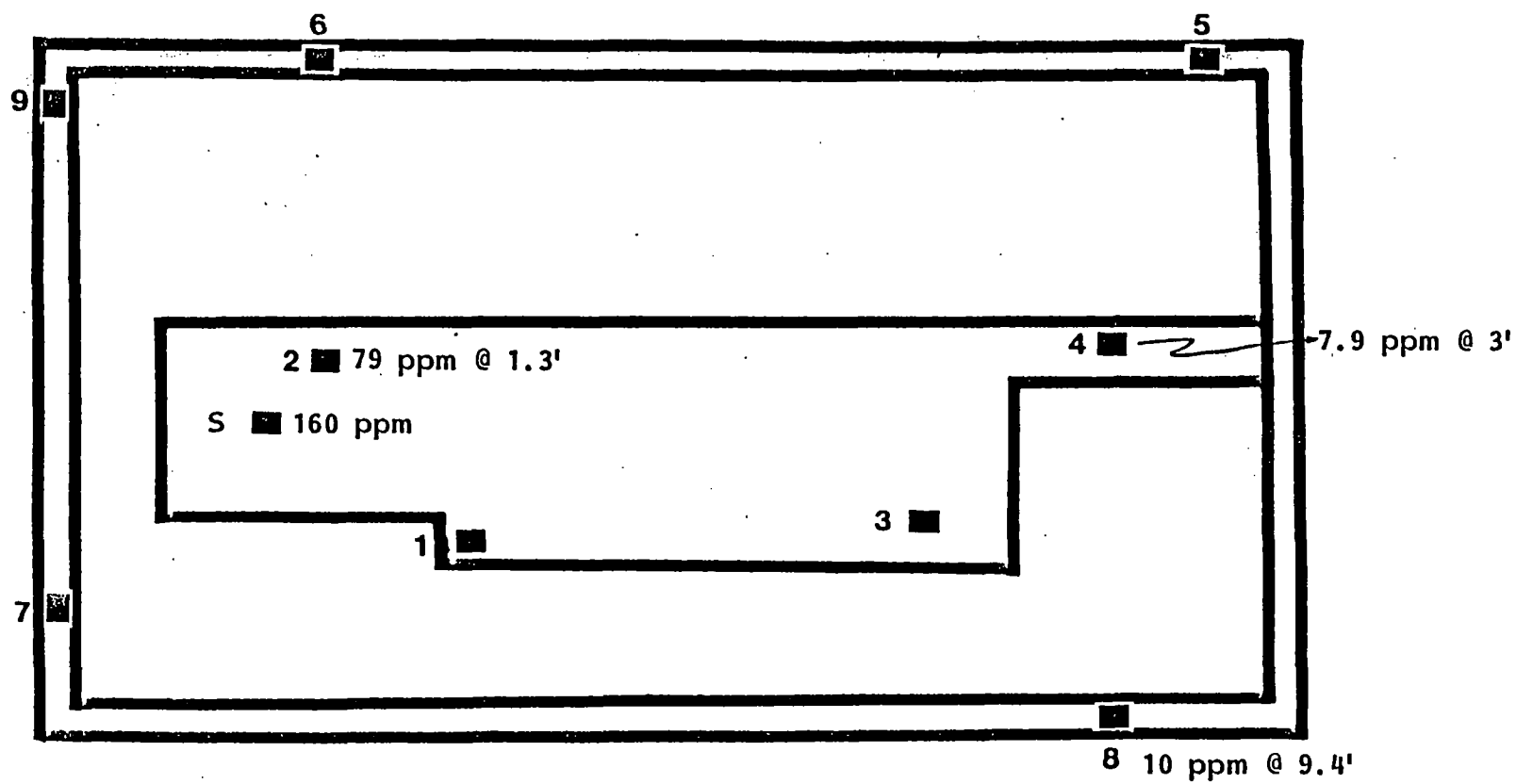
C.6: Distribution of CADMIUM on the site.



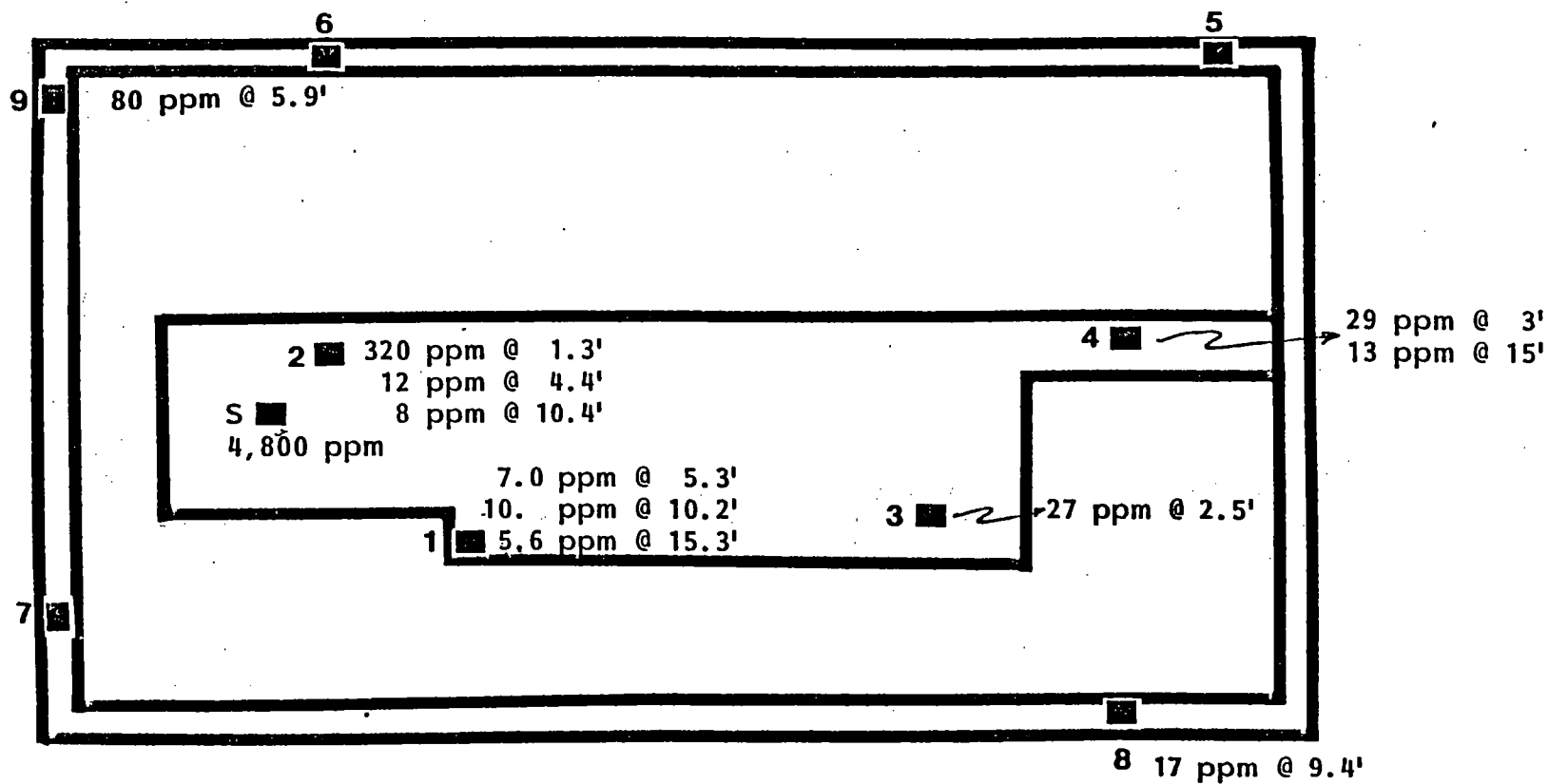
C.7: Distribution of CHROMIUM on the site.



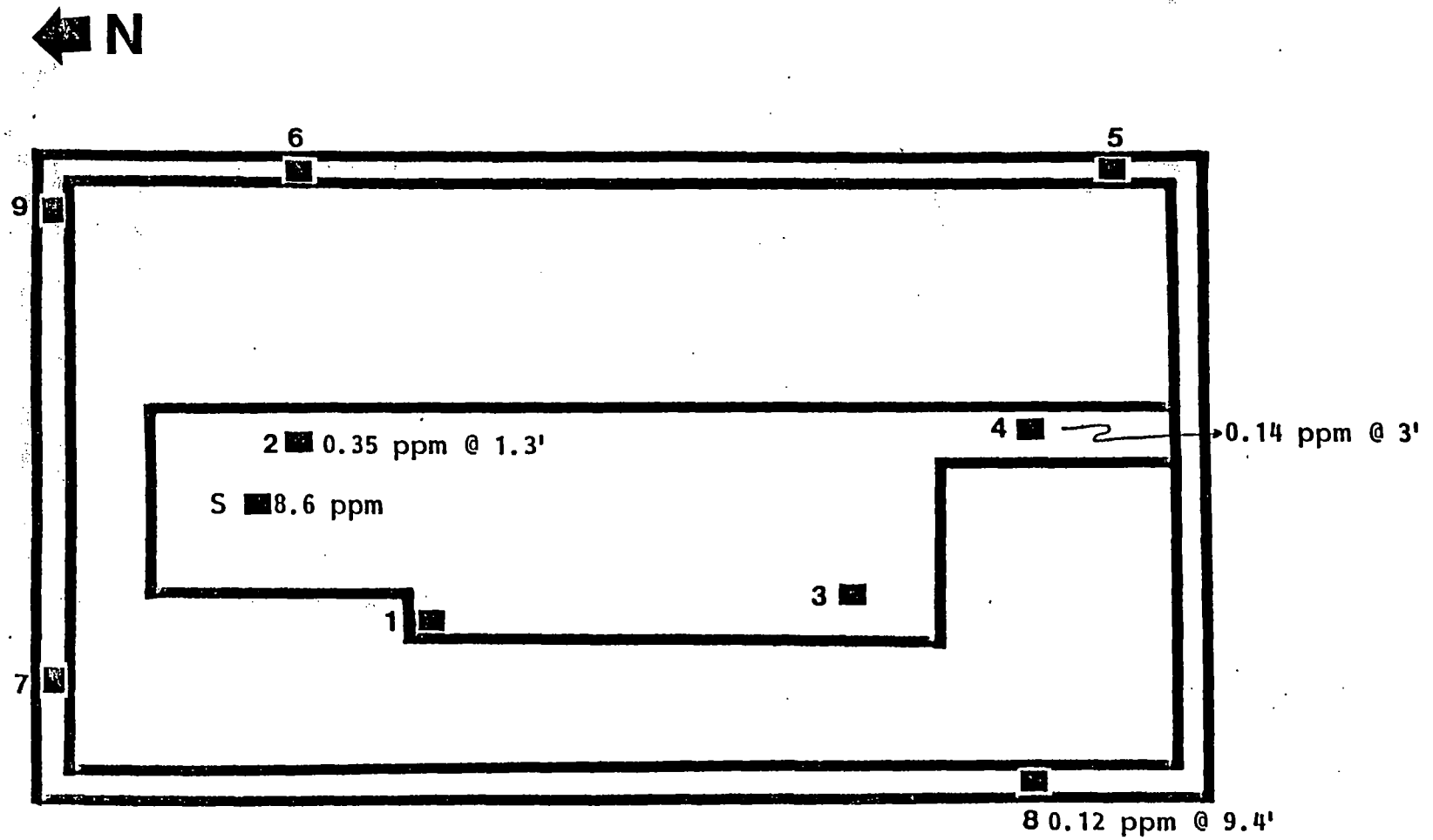
C.8: Distribution of COPPER on the site.



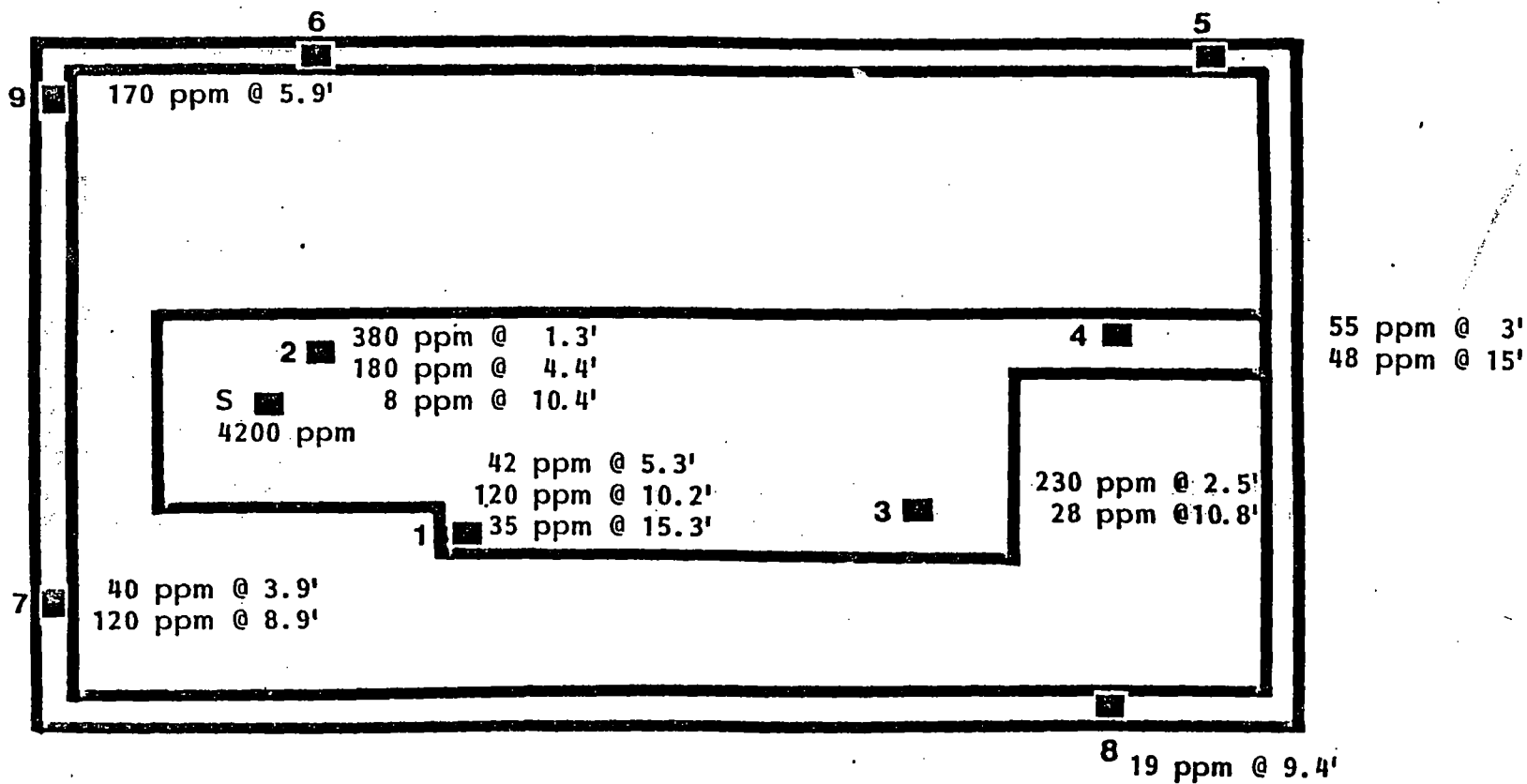
C.9: Distribution of LEAD on the site.



C.10: Distribution of MERCURY on the site



C.11: Distribution of ZINC on the site.



**AFFIDAVIT OF FRED OBERLIN REGARDING OPERATIONS AT NL INDUSTRIES, INC.'S
FORMER FACILITY AT 2240 24TH STREET, SAN FRANCISCO, CALIFORNIA**

STATE OF CALIFORNIA)
) ss.
COUNTY OF ORANGE)

Fred Oberlin, being first duly sworn, upon his oath upon personal knowledge and under the penalty of perjury, states as follows:

1. I have personal knowledge of the matters set forth herein.
2. My date of birth is May 12, 1919. I am 92 years old.
3. I am not aware of any medical condition that would affect my ability to understand questions or to recall past events.
4. I worked for National Lead Company ("NL") from February 19, 1951 to April 1, 1977.
5. I worked as the Technical Supervisor of three laboratories on the West Coast, including the NL facility located at 2240 24th Street in San Francisco, California ("the 24th Street Plant") from 1962 until 1970, when NL closed the facility.
6. The 24th Street Plant produced paints and varnishes.
7. In my job as Technical Supervisor, I was responsible for overseeing the laboratory at the 24th Street Plant and had personal knowledge of the ingredients used in the varnishes manufactured at the plant.
8. Varnishes were largely produced for use by NL in the paint production process and a small quantity was sold to outside companies.
9. Varnishes made at the 24th Street Plant were composed of gum or phenolic resins, vegetable oil (like linseed), and paint thinner.
10. Lead dryers may have been added to certain varnishes in small quantities.
11. When lead dryers were added to varnishes manufactured at the 24th Street Plant, approximately 4 to 5 pounds of dryer were added to every 100 gallons of varnish. Dryers consisted of 24% lead for every 4 to 5 pounds of dryer.

12. No PCBs or "aroclor" were used at the 24th Street Plant in the production of varnishes or paints during the time I was employed there (1962-1970).
13. I am familiar with the term "PCB" and "aroclor" because "aroclor" were used in my previous employment.
14. Used 50-gallon varnish drums were picked up from the 24th Street Plant for cleaning by a drum re-conditioning company, but I do not recall the name of the company that picked up the drums.
15. The drums were essentially empty when picked up.
16. To the best of my knowledge, the 24th Street Plant operated Monday through Friday. The plant was closed on holidays.
17. NL's lacquer warehouse was located on Marin Street in San Francisco, which was approximately 1 to 1 ½ miles from the 24th Street Plant.
18. I have knowledge of NL's lacquer production processes at the Marin Street facility because I was the Technical Supervisor of the laboratory.
19. Lacquer manufacturing was a different process than varnish or paint manufacturing, and NL lacquer was made of Nitrocellulose, Alkyds (composed of phthalic anhydride, glycerin, and oils like ~~linseed~~^{FLD.}, coconut, or castor oils), hard resins and thinner.
20. Neither lead (litharge) dryers, PCBs or "aroclor" were used in the production of lacquer on Marin Street during the time I was employed there (1962-1970).

DATED this ^{OCTOBER} ~~14~~ day of ~~September~~, 2011


FRED OBERLIN

~~SUBSCRIBED AND SWORN TO before me this ____ day of October, 2011, by Fred Oberlin.~~

Notary Public

My Commission Expires:

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California

County of

ORANGE

On

OCT. 14, 2011

Date

before me,

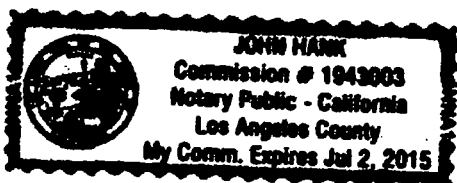
JOHN HANK

Here Insert Name and Title of the Officer

personally appeared

FRED E. OBERLIN

Name(s) of Signer(s)



who proved to me on the basis of satisfactory evidence to be the person~~(s)~~ whose name~~(s)~~ is/~~are~~ subscribed to the within instrument and acknowledged to me that he/~~she/they~~ executed the same in his/~~her/their~~ authorized capacity~~(ies)~~, and that by his/~~her/their~~ signature~~(s)~~ on the instrument the person~~(s)~~, or the entity upon behalf of which the person~~(s)~~ acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal

Signature

Signature of Notary Public

Place Notary Seal Above

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document

Title or Type of Document: _____

Document Date: _____

Number of Pages: _____

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____

- ☐ Individual
☐ Corporate Officer — Title(s): _____
☐ Partner — ☐ Limited ☐ General
☐ Attorney in Fact
☐ Trustee
☐ Guardian or Conservator
☐ Other: _____

Signer Is Representing: _____

RIGHT THUMBPRINT
OF SIGNER
Top of thumb here

Signer's Name: _____

- ☐ Individual
☐ Corporate Officer — Title(s): _____
☐ Partner — ☐ Limited ☐ General
☐ Attorney in Fact
☐ Trustee
☐ Guardian or Conservator
☐ Other: _____

Signer Is Representing: _____

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OF SIGNER
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